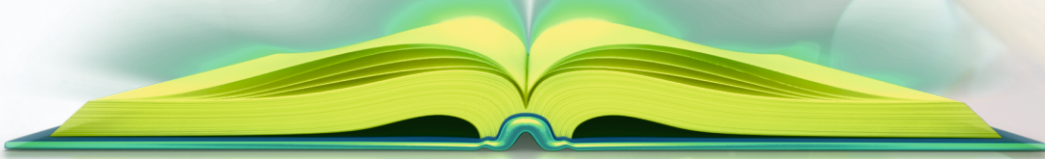




National Integrated
Medical Association
Dombivli



Maharashtra Council of
Indian Medicine



श्रीवेदः 2018

28 JANUARY, 2018

ONE DAY NATIONAL SEMINAR

Organized By

NATIONAL INTEGRATED MEDICAL ASSOCIATION
Dombivli Branch

In collaboration with

MAHARASHTRA COUNCIL OF INDIAN MEDICINE INDIA

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B.A.M.S., B.A. (Yogshastra),
Secretary,
NIMA Dombivli, Thane

FROM THE SECRETARIAL DESK....

At the onset I wish you all a Happy New Year 2018 on behalf of NIMA Dombivli branch.

It gives me a great pleasure to welcome you all to this National Conference “**Alloवेद:18**”

I have been experiencing the verse,

“एकंशास्त्रमधीयानोन वद्याच्छास्त्रनिश्चयम्तस्माद्बहुश्रुतःशास्त्रं वजानीयाच्चि कत्सकः॥”

while practicing for last 27 years.

To update the knowledge in our profession we have to study the subject persistently, have to participate in scientific discussions, observe allied sciences & obtain training from concerned specialists. For this reason NIMA Dombivli planned this conference.

The objective of this Alloवेद:18, is to keep an ISM graduate well informed about the medicines, ways of treatment & other coexisting pathies.

To promote this integrated concept to ISM graduates throughout the country we decided to organize this event as national event.

Students from ISM institutes,/colleges will get awareness about integrated medicine. They can combine their academic & application skills gathered from regular case studies in presenting papers as well as in writing articles in the journal. This conference will serve as a platform for these promising & deserving professionals.

When total health is gaining importance globally, integrated medicine- a combination of Allopathy, Ayurveda & Yoga-is a need of the hour. To get acquainted with this, in the context of benefits to the society, is also a motto of this conference.

To arrange a National Conference is not less than a herculean task and the whole work is a TEAM WORK .It is made possible by all the senior members in NIMA Dombivli and helping hands of all committeemembers.

My sincere thanks to our President Dr.Gayatri Kulali for supporting to plan this event and taking lot of efforts. I cannot express in words the guidance provided by Dr Ajit Shah(Past President) right from the beginning .

I am thankful to Dr Ashutosh Gupta, Dr Dilip Wange,Dr Vinayak Tembhurnikar,Dr Vinayak Mhatre for accepting the invitation & gracing the occasion.

I convey special thanks to Dr Priyanka Risbood –Jt Secretary,who has taken enormous & sincere efforts in planning ,giving ideas about papers,posters,articlepresentations & sharing the responsibilities equally.I also offer thanks to the treasurer Dr Madhuri Bahirat who helped us with most vital element ; the finance.

I am thankful to Dr Kaushik Patel ,Dr Kshirsagar for taking special efforts in monitoring registrations of delegates.

I offer thanks to advisory committee members ,patron members , peer review committee members, stage,stall,registration & food committee members.

Thanks are also due to all experts, participating professionals.

Let me thank all those who helped in various ways in arrangements for making this event successful including Mr Suhas Pandit of Mauli Hall, all companies for participation & assistance by advertisements & stalls.

The beautiful souvenir published is due to the efforts of editor Dr Archana Kulkarni who willingly accepted the responsibility & executed successfully. Mr Subodh Patwardhan of Aryadurga Enterprises did the printing in time & I am thankful to them.

Before concluding, Special thanks to all delegates whose participation will make a great success.

I am confident that the conference will spread the target message & knowledge ,across the audience by presentations of all experts &रुग्णहितेषुदक्षःसर्वथा| will get highlighted as an outcome of "Alloवेदः18".



Dr. Abay Kanetkar
Sr. Member, NIMA Dombivli

Herbo-Mineral of our Country

Ayurved is the ancient medical science in the world. All traditional medical therapies written in Ayurved -Granth are gaining more importance today in global medical world. Yog, Panchkarma, Ksharsootra, Agnikarm and so many traditional-Indian-Medical-Knowledge have very prime role in global-intellectual-lite. As western countries are looking to us as a miracle on global- medical-dias. Ayurvedic herbo-mineral medical therapy is one of such miracle type of science written in Ayurved. Even Ayurved is first medical science in the world which showed that minerals can be used as a medicine to cure diseases, Today WHO is also recognizing many Ayurvedic traditional systems for cure.

Apart from this all, some bad propaganda is also going worldwide against our scientific herbo-mineral therapy. First in 2001 one criticizing article was written in medical book in Britain that "Ayurved is unscientific." After some time, they had taken back their words. Again US medical journal also criticized that "Indian" herbo-mineral-drugs are toxic, One news in Times of India (16-12-04)

"American Study Cautions against Ayurvedic Cures

Washington : The US Medical research community has sounded a heavy metal warning against ayurvedic cures. Herbal products from the Indian system of medicine sold in the US contain dangerous levels of lead mercury and arsenic, researchers have cautioned.

In a study published in the latest issue of the prestigious Journal of American Medical Association (JAMA) researchers from the Harvard Medical School reported that Herbal Medical Products (HMPs) sold as remedies for treatment of ailments

such as arthritis and diabetes contained toxic levels high enough to cause poisoning "Users of Ayurvedic medicine may be at risk for heavy metal toxicity, and testing of ayurvedic HMPs for toxic heavy metals should be mandatory." The study by Robert Saper and his colleagues warned.

The research team scoured outlets selling ayurvedic remedies-both American Vendors and Indian grocery stores-within 20 miles of Boston and bought 70 HMPs. Fourteen of the 70 contained heavy metals, they said, cautioning that if taken as recommended by the manufacturers, each of the 4 could result in metal intakes above published regulatory standards.

The study comes amidst ayurveda's creeping recognition in the US in the face of steep increase in medical care and drug costs. A US health survey in 2000 estimated that 750, 000 American adults also had ayurvedic cures, the Saper study said. There is a full-fledged Ayurveda Institute in Albuquerque, New Mexico, Which offers courses and seminars in the Indian medicinal science.

Meanwhile the study has been received with dismay by the growing tribe of ayurvedic practitioners in the US.

Still there are no comments from Indian - Ayurved-Scholars on this.

Here, I am giving a reference by a marathi book : "Ayurved - Sanchit & Vastav" (आयुर्वेद संचित आणि वास्तव) written by marathi author Mr. A. V. Bakre (Granthali Prakashan). In this book some examples are given.

"(i) There are 3 patients who were taking Malla-Sindoor (Tablet contained Parad/Mercury and Somal/Arsenic) in heavy dose (daily 1 gram - 2 weeks). All 3 are tested in Bhabha Atomic Research Centre, But nobody was found to have any additional



& drinks without taking any drug. We should note this point also.”

Readers, I wrote to Lokasatta [Marathi newspaper] all this contents [5/12/01]

Immediately (Late) Dr. Sharadini Dahanukar well-known Ayurved Researcher in KEM and Nair Hospital, Mumbai (Maharashtra) wrote answer to my letter in Lokasatta. [20/12/01]

Dr. Abhay Kanetkar raised an important issue of Ayurved in Lokasatts. Yes, some unwanted effects can show definitely from Ayurvedic herbo mineral drugs but that is not bad property of Ayurved Science When drug-manufacturers have not fulfilled a total scientific purification processes during drug-manufacturing (ग्रंथोक्त शुद्धिकरण प्रक्रिया) In such cases unwanted effects can show. As per Ayurvedic science a definite scientific purification process is written in scientific purification process is written in Ayurvedic Granth to detoxicate herbo-minerals.

If this system is not used properly by manufacturers, the fault is not of Ayurved.”

Then why this criticism occurs again & again? We must be alert. We should publish and do canvas our purification & detoxication scientific process at herbominerals from Ayurved books worldwide. We should warn global-researchers that you must check the drug on which you are going to publish - reports with mentioning particular manufacturer of that drug

We (NIMA) should demand that ISM Dept. of Govt of India should officially declare by extra-ordinary notification that our drugs are not toxic after using total detoxification system while manufacturing the drug. Metal and plants are detoxicated by our scientific-process of Indian medicine. ISM Dept. should make available all traditional knowledge of our detoxication process written in Ayurved on internet and TKDL (Traditional Knowledge Digital Library). Can we do that?

ABSTRACT

INFERTILITY AND AYURVEDA

Dr. Rahul Katkar

M.D. Scholar

Kaumarbhritya

Dullaiya Smriti Ayurved P.G.
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Infertility is present since long ago but now a days it increases massively due to some environmental social , psychological and nutritional factor. Today modern medicine is able to find out cause of infertility, upto certain extent with the help of modern diagnostic tests. Using these tests, treatment can be done, but 100% surety is not possible.

Still according to ayurveda infertility means Vandhatva, that is due to unhealthy condition of one or both partners. Ayurveda is able to treat it with help of Panchakarma and Medicine. Ayurvedic medicines act symptomatically as well as systematically, so we can expect more results from ayurved. Still ayurveda needs to work on infertility.

॥ रुग्णहितेषु दक्षः सर्वथा ॥

Dr.Priyanka A.Risbood
(M.D.Kayachikitsa, M.A.Sanskrit)
Jt. Secretary :- N.I.M.A. Dombivli , Thane
Co-ordinator :- Alloवेद:2018 National Conference



Alloवेद:2018 at a glance from Co-ordinator

Namaskar,

Today, the 28th January'2018, the auspicious day of One Day NATIONAL CONFERENCE, organized by NIMA Dombivali Branch, in collaboration with Maharashtra Council Of Indian Medicine, India; 'Alloवेद:2018' which itself reflects Integration.

I have a great pleasure to perform my role as a 'Co-ordinator' in this conference. For conferring with me this opportunity, I am thankful to Dr.Gaytri Kulali and especially to Dr. Manisha Moghe. Certainly, very glad to present myself in front of you in this conference.

Innovations in the medical sciences with the help Integration along with translational researches between Ayurveda and Modern Sciences, is the need of efflux of time to maintain the health of Society. N.I.M.A. played a very nice role in Integration of our ancient science Ayurveda through Modern sciences. The new innovation comes into existence by way of needs of people, various developments in health sciences and by experiments too.

Mission of this Conference is to enhance the power of Ayurvedic principles over the Globe with the help of modern medicines & Health Sciences. For achieving this, we all have gathered together to accept the advance techniques by integrating i.e. synchronizing the medical knowledge, to promote Healthiness & eliminate the Health disparities of people. By doing deep studies of Ayurveda, the new inventions comes into existence and that becomes helpful to Medical Practitioners as well as students from different pathies.

In this conference, the participants are Practitioners, Academicians, Post-graduate scholars coming from various Ayurvedic colleges all over the India. They are going to present their Research Papers, Posters and Articles in this National conference. Also the inter-national Delegates & Resource Persons are actively participated in this Seminar. This conference has provided great platform for all the Researchers from AYUSH to enhance their knowledge in Ayurveda as well as Modern Sciences. The Research articles have been published in the renowned Bimonthly e-journal – "Scholarly Research Journal Of Interdisciplinary Studies" January 2018 Issue. I express my gratitude towards all the honorable Peer Review Committee members for this issue and Editor-in-chief Dr.Yashpal for his support and guidance in this publication. The selected abstracts of Papers, Posters and Articles are published in this Souvenir.

I also congratulate Dr. Archana Kulkarni, Editor of the **Alloवेद:2018** Souvenir for her efforts and devotion.

In this National Seminar, the Lectures arranged by well renowned Hon. Doctors, practicing in this sphere, on various topics, will be Certainly memorable one to all medical practitioners and students too. I also extend my note of thanks to all the N.I.M.A. seniors for their contribution in making of **Alloवेद:2018**.

I wish every success for this National Conference.

Let us join together to make it great success!

An International, Peer Reviewed, & Referred Quarterly

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INTEGRATIVE APPROACH OF CANCER TREATMENT

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Cancer is a disease which is mentioned in Ayurvedic text as a group of diseases like DushtaVrana, DushtaGranthi, DushtaNadivrana, DushtaVisarpa, DushtaVidradhi which are the endpoints of untreated VranaShotha. Non-solid tumours like leukemia, Hodgkin's disease are akin to Sannipatik Jwara, Tiryakgata Raktapitta, Tridoshaja Pandu, Krumi. Dhatugata Awastha and DhatupakaAwastha of diseases are similar to that of metastasis and advanced necrotic stage of cancer respectively. Multiple factors are involved in pathogenesis of cancer viz long lasting JatharagniDushti leading to DhatwagniDushti, Rasa – Rakta and Mansa dhatudushti, Ojavikruti. Several risk factors like consumption of wrong diet frequently and for long duration, unhealthy lifestyle, unusual mental stress, external factors like trauma, heredity and addiction are responsible for development of cancer.

Cancer is a KruchhrasadhyaVyadhi (difficult to treat) and needs integrative approach to treat and control it. Conventional treatment like chemotherapy, radiotherapy and surgery are essential to get rid of tumour, while Ayurvedic line of treatment is beneficial to improve Quality of life of cancer patients, which is hampered due to disease as well as side-effects of chemotherapy and radiotherapy. Panchakarma and Rasayanachikitsa are useful to detoxify and boost up immune system of the body, so as to improve QoL and increase disease free survival. Comprehensive Ayurvedic treatment comprises ShamanaChikitsa in the form of herbo-mineral and metallic medicines, Panchakarma, Rasayanachikitsa, ShashtiUpakrama, healthy diet and ManasaChikitsa (counselling) as per need of patient and disease.

ROLE OF EARLY EYE SCREENING FOR DIABETIC RETINOPATHY

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Background:

Diabetic retinopathy screening meets the World Health Organization criteria for screening programs, which stipulates the following: the condition must have not only a recognizable early or latent stage but also effective and well-accepted treatment options, and the condition must currently be (and be expected to remain) an important public health concern [5]. Of course, efforts to increase patient screening for diabetic retinopathy should accompany efforts to increase patient education regarding the disease. Although significant effort is being made to screen for and educate people about diabetic retinopathy. This was particularly prevalent in patients with less severe diabetic retinopathy, shorter diabetes duration, and lack of a recent eye examination.

Objectives:

1. To study early eye screening in Diabetes
2. To rule out DR in early condition

Importance of screening in DR:

Screening is a process by which unrecognized diseases or defects are identified by means of rapidly applied tests in apparently healthy individuals.

The four cardinal principles for screening recommended by the WHO (10) are as follows:

1. The condition should be an important health problem with a recognizable presymptomatic state.
2. An appropriate screening procedure which is acceptable both to the public and health care professionals should be available.
3. Treatment for patients with recognizable disease should be safe, effective and universally agreeable.

4. The economic cost of early diagnosis and treatment should be considered in relation to total expenditure on health care, including the consequences for leaving the disease untreated.

DR conforms well to these principles. In DR, early detection and treatment is of vital importance as it may prevent vision loss and blindness.

DR is a chronic disease with a long latent phase. Screening for DR is cost-effective when compared with disability loss for people going blind in the absence of a screening program.

At a primary level, emphasis should be on early identification of diabetic patients from the community and an efficient referral system so that all the diagnosed cases of diabetes may be referred for further diagnoses and treatment of DR at secondary or tertiary level. It is suggested that patients with type I diabetes should be screened annually for retinopathy, 5 years after the onset of diabetes. Patients with type II diabetes should have initial examination for retinopathy shortly after the diagnosis and the examination should be repeated annually or earlier, as per the severity of the retinopathy. Pregnant women with diabetes should have a comprehensive eye examination in first trimester and close follow-up throughout pregnancy.

At the secondary level, more emphasis is required to provide diagnostic facilities for DR. This involves availability of sufficient equipment for retinal examination and trained ophthalmologists for interpretation of findings to identify cases of DR requiring referral. These patients requiring further management for DR should be referred to tertiary level retina unit.

At tertiary level, one retina unit should be identified for every 5 million population where facilities of fundus photography, fluorescein angiography along with laser photocoagulation should be available for diagnosis and effective management of DR. The unit should also provide training facilities for secondary level service providers for diagnosis and referral of DR cases.

The program requires networking of the government and private hospitals, general physicians and non-governmental organizations (NGOs) with the secondary and tertiary level centres providing screening and diagnostic facilities for DR. At all points of interaction with the health professionals, the patient should be stressed about the need for good control of blood sugar and regular follow-up.

Methods:

Criteria for Review and Referral:

1. Annual review but referral is not appropriate:
 - a) Normal fundus
 - b) Mild background diabetic retinopathy (BDR) with small haemorrhages and /or small hard exudates more than one disc diameter from fovea.
2. Routine referral to ophthalmologists:
 - a) BDR with large circinate exudates within the major temporal arcades but not threatening the fovea
 - b) BDR without maculopathy but with reduced visual acuity to determine causes of visual impairment
3. Early referral to ophthalmologist:
 - a) BDR with hard exudates and/or hemorrhages within one diameter from the fovea
 - b) Maculopathy
 - c) Pre-proliferative DR
4. Urgent referral to ophthalmologist:
 - a) Proliferative DR
 - b) Pre-retinal or vitreous hemorrhage
 - c) Rubeosis iridis
 - d) Retinal detachment

Screening Tests for DR:

Many different modalities of screening are in use depending on the availability of local facilities. These include number of available ophthalmologists, other trained healthcare professionals, and equipment and resources available for screening. Single field fundus photography with interpretation by trained readers could serve as a screening tool to identify patients of DR. Combining two modalities of screening (e.g. direct ophthalmoscopy in conjunction with retinal photography) provides excellent sensitivity(87.3%),(17) but increases the cost per case screened and is often only possible in a hospital-based setting. Screening involves measurement of visual acuity for both distance and near vision using ETDRS chart.

Tele-medical screening may be undertaken to screen patients with DR. A major advantage of digital technologies is the ability to transmit images to a centralized reading center for grading. This involves a remote imaging system, a centralized grading center and a data storage system. A significant increase in rate of DR surveillance and in the rate of laser treatment for DR may be achieved by implementing retinal image technology in the primary care setting.

Anterior segment examination is conducted using slit lamp to rule out complications of DR like rubeosis iridis and neovascular glaucoma. Posterior segment should be examined following pupillary dilatation with 1% tropicamide by indirect ophthalmoscope and +20 D lens by a trained ophthalmologist. For evaluation of macula, indirect biomicroscopy on a slit lamp with +90 D lens is the standard. The direct ophthalmoscope is limited in this respect as it offers a two-dimensional view. Other tests like fundus photography by a retina specialist to assess the severity of DR are required to determine the site of leakage in macular edema and neovascularization. This helps in planning for the treatment of cases.

Based on an assessment of available cohort studies, the most effective strategy for testing is the use of mydriatic retinal photography with the additional use of ophthalmoscopy for cases where photographs are upgradeable. This does not exclude the use of ophthalmoscopy alone for opportunistic case finding but there is evidence of considerable variation in effectiveness of this test. Screening for DR needs to be community based in addition to clinic-based services and can include a range of examination modalities.

Screening Models for DR:

Diabetes screening camps

The screening camps are for screening diabetes with a focus to enhance awareness of diabetes and DR at a primary level. Screening camps for diabetes can be organized by general hospitals, endocrinologists and local NGOs. All patients above 30 years of age should undergo screening of diabetes by finger prick method for random blood sugar estimation using a glucometer. High-risk screening should be promoted to examine patients with positive family history of diabetes mellitus. Any person with random blood sugar more than 200 mg/dl is considered as newly diagnosed case of diabetes and should be referred for further diagnosis of diabetes and screening for DR. Community participation is the key to

success for screening. Local village groups like women's self-help groups and volunteers play an important role in motivating diabetics to attend screening camps.

DR screening camps

In these camps, all diabetic patients referred through a network from government and private hospitals, general physicians and diabetologists, laboratories and through diabetic screening camps are screened for DR. The eye examination includes visual acuity using EDTRS chart, anterior segment evaluation by slit lamp, dilated fundus evaluation with indirect ophthalmoscope and +20 D lens. Patients with sight-threatening DR are referred to base hospital for further management and treatment.

Comprehensive eye screening camps

Screening for DR is done along with screening for other blinding ocular conditions. Dilated fundus examination using indirect ophthalmoscope and +20 D lens is done by a trained ophthalmologist. The cases of DR like severe non-proliferative DR and proliferative DR are referred for further management.

Opportunistic screening model

As opposed to population-based screening, opportunistic screening relies on detection of disease in patients who present to health care providers for various complaints. Most elderly patients, those with a family history of diabetes (all at risk for diabetes and diabetic eye disease), visit the ophthalmologists and optometrists for other eye care need. They also visit physicians for medical needs. These high-risk patients visiting the health care providers for other problems may be screened for DR. To be effective, ophthalmologists, optometrists, diabetologists, physicians and other health care personnel, must all be involved in such case detection. The National Program for Control of Blindness of India also recommends opportunistic screening for identification of DR.

Tele-DR screening approach

In this approach, a mobile van with satellite connection goes to remote areas and trained ophthalmic technicians take digitized fundus images which are viewed in real time by retinal specialist at base hospital. The patients with DR are identified at primary level and are referred to the base hospital where further treatment and diagnosis can be done. This method reduces the cost of transporting all cases to the base hospital.

Detection of DR at various levels of service Delivery

Personnel involved in the detection of diabetes and DR at each level of service delivery in the health care system are as follows:

PHC medical officers and general physicians

The medical officer should check the capillary blood sugar of each patient over 30 years the first time they are seen, or earlier if they have symptoms or a positive family history, and then every 2 years after that. If the result is more than 140 mg/dl, they should be entered into a diabetic register and the patient should be referred to a physician at the secondary center. They should do a dilated fundus examination if possible; if not, they should refer the patients to an ophthalmologist for an eye check-up.

Ophthalmic assistants and optometrists

Any patient they see, who is more than 30 years or has a family history of diabetes, should be asked to get their blood sugar checked. For existing and newly detected diabetics, they should do a visual acuity check-up, refraction and a dilated fundus examination with a direct ophthalmoscope. If there is any abnormality, they are referred to an ophthalmologist; if not, they are asked to come for an annual check-up.

Laboratory technicians

Those patients with a high blood sugar (<140 mg/dl) or positive urine sugar should be advised to see a physician for the control of diabetes and to have his/her eyes checked by an eye care provider.

Opticians

All presbyopic patients are advised to get their blood sugar examined. All patients not improving to 6/9 in either eye or those who are known diabetics should be asked to get a detailed examination from an ophthalmologist/optometrist.

Pharmacist

Every patient who comes to buy any anti-diabetic medicine should be asked to get his/her blood sugar examined, visit a physician and an ophthalmologist once every year.

Diabetologists/Endocrinologists

All newly diagnosed diabetics should be referred to an ophthalmologist for bilateral ocular examination and counseled about annual fundus examination.

Ophthalmologist (sub-district/district and private)

The ophthalmologists during the first contact should do a detailed evaluation and undertake comprehensive eye examination. They should grade DR and refer for treatment, if required. They should also counsel the patient for regular follow-up.

Screening of DR in relevance to the national programmes

The National Diabetes Control Programme aims to decrease the burden of diabetes by improving the health care delivery system. The pattern of diabetes treatment and management can be improved through a multi-pronged approach involving healthcare professional training, awareness campaign, patient education and training of other medical personnel involved in the management of diabetes and referral for its complications like retinopathy. A systematic approach to improve awareness about diabetes, its complications and its control both among patients and the medical fraternity is the need of the hour in India today.

Through the programme, awareness needs to be created at all levels of health care delivery. The general practitioners should refer all diabetic patients to an ophthalmologist for an eye check-up. The Diabetologists or Endocrinologists should refer all newly diagnosed diabetics to an ophthalmologist for bilateral ocular examination and counselled about annual fundus examination. Diabetes and DR can be brought under control by organizing public awareness campaigns and events and diabetes health awareness programmes to address the general public and policy and decision makers. Training of medical staff and community nurses in screening patients of diabetes and referral to ophthalmology centres, registration of diabetes societies and helping poor diabetes patients, conducting or facilitating training or continuing medical education to community workers and other paramedical staff, organizing awareness training programmes among various target groups (patients and their families, high risk groups, policy makers, programme managers and the general public), education of the public and patients on diabetic retinopathy and its importance can be mobilized through the programme to decrease diabetes associated morbidity and blindness.

The National Blindness Control Programme lays stress on the prevention, screening and management of DR. The Eleventh plan of NPCB (2007-12) clearly emphasizes the need to screen for DR, in known diabetic patients and at risk population. Opportunistic screening by ophthalmologists of all diabetic patients attending diabetic clinics and hospitals need to be stressed. The operational guidelines for this are by screening all known diabetics for DR and

providing laser treatment to those who may require it. All diabetic patients referred through a network from government and private hospitals, general physicians and diabetologists, laboratories and through diabetic screening camps, are screened for diabetic retinopathy. Proper emphasis on Information, Education and Communication and early diagnosis in relatives having DM could go a long way in capturing hidden cases of DM in the community

Results:

Diabetic retinopathy is a micro vascular complication of diabetes mellitus and is a significant cause of new-onset blindness. DR screening programs is very important for early identification of the condition. If DR diagnosed in early condition with the help of screening tests than management part will be easy and the most important thing it will prevent blindness.

Conclusion:

Diabetic Retinopathy is a leading cause of preventable blindness and requires timely screening and treatment. Racial, socioeconomic and geographic disparities in screening rates and follow –ups still exist. Efforts to decrease barriers including utilization of electronic medical records, system alerts, educational programs, language services and combination of primary care and ophthalmology services into single facilities have improved screening rates and follow –up. Tele health has also shown great promise as a method for extending specialist coverage. Future research is needed in this important area.

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IMMUNITY CONCEPT AS PER AYURVEDA

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Abstract

Resistance to diseases or immunity against diseases is of two kinds i.e. the one which attenuate the manifested disease and other variety prevents the manifestation of diseases. During certain conditions, or due to certain factors, even unwholesome food does not produce diseases immediately. All unwholesome food articles are not equally harmful, all dosas are not equally powerful, and all persons are not capable of resisting diseases. Over obese individual; over emaciated person; whose muscles and blood are diminished markedly; debilitated person; one who consumes unwholesome food; one who consumes less amount of food; whose mental faculties are weak; on the other hand, individuals having opposite type of physical constitution are capable of resisting diseases. Factors which contribute for vyadhikshamatva are normal dosa, equilibrium state of dhatu, normal agni, patency of srotas etc. or factors which supports the equilibrium state of all physiological parameters. Innate immunity may be correlated to sahaja bala described in Ayurveda. Kalaja anad yuktikrita bala may be correlated to acquired immunity. Present article through light on the concept of immunity vis-a vis vyadhiksamatwa. Author has collected many references regarding how to enhance immunity and keep body disease free by adopting ayurvedic principles.

Keywords: *Vyadhiksamatwa, sahaja bala, kalaja bala, yuktikrita bala, innate immunity, acquired immunity.*



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INTRODUCTION

During certain conditions, or due to certain factors, even unwholesome food does not produce diseases immediately. All unwholesome food articles are not equally harmful, all dosas are not equally powerful, and all persons are not capable of resisting diseases. Resistance to diseases or immunity against diseases is of two kinds i.e. the one which attenuate the manifested disease and other variety prevents the manifestation of diseases. Unwholesome food substances become more harmful depending upon the nature of the locality, time, combination, potency and excessive quantity. For example, vrihi type of corn is unwholesome because it aggravates pitta. The same become more unwholesome if consumed

by marshy land (anupadesha) people, the same become less harmful if consumed by dhanvadesha people. It is more unwholesome during sharad ritu (autumn season) and less harmful in hemanta ritu (winter season). If it is consumed with curd, phanita (penidium) become more unwholesome and the same become less harmful if consumed with honey. If consumed hot it is more unwholesome and the same if taken in cold condition becomes less harmful. If consumed more in quantity become more unwholesome and become less harmful if consumed less in quantity. The dosas are exceedingly painful, acute and difficult to cure during their multiple combinations, if they require mutually contradictory therapies, if they are deep seated i.e. deeper dhatu like majja etc. are involved in the pathogenesis of disease. If disease is chronic it become very difficult to cure because they are deep seated and gives displeasure and disease becomes incurable. If dasa pranayatana are involved in the disease process along with other vital organs like hridaya etc, then disease become difficult to cure. If vital organs afflicted, disease become difficult to cure. If disease manifest instantaneously indicates disease become very difficult to cure (Byadgi, 2007).

The following persons are unable to resist diseases:-Over obese individual; over emaciated person; whose muscles and blood are diminished markedly; debilitated person; one who consumes unwholesome food; one who consumes less amount of food; whose mental faculties are weak; on the other hand, individuals having opposite type of physical constitution are capable of resisting diseases (Byadgi, 2007)..

Contributing factors for Vyadhikkshamatva :-Factors which contribute for vyadhikshamatva are normal dosa, equilibrium state of dhatu, normal agni, patency of srotas etc. or factors which supports the equilibrium state of all physiological parameters. These points are described below (Byadgi, 2007).

Vyadhisaha means one who is capable of resisting diseases. Depending on the nature of unwholesome food, condition of vatadi dosas and person who is not capable of resisting diseases suffers from diseases mild or severe, acute or chronic. Vata, pitta, kapha manifests different diseases depending upon their vitiation at various places. Equilibrium state of dhatu is called svastha. Upayogi hetu (useful etiological factors) are those useful to the body and they indulge in protection of dhatus, which is important for homeostatic condition of body and mind. Aim and object of Ayurveda is the maintenance of equilibrium state of tissue elements. Regular oil massage leads to strong body physique. Consumption of proper amount

of food certainly helps the individual in bringing strength, complexion, happiness and longevity. A intelligent person should be vigilant about his duties towards his own body like an office in charge of a city and a charioteer towards the city and the chariot respectively. So, wise person should protect his body both externally and internally by adopting dinacarya in his daily routine. Person who is desirous of healthy should adopt the healthy practices related to diet, conduct and activities. Equilibrium state of dhatu is health and gives rise to pleasure. There are three factors, which supports life i.e. ahara (food), svapna (sound sleep) and brahmacharya (one who is having control over his senses and full of spiritual bliss). By this body will be endowed with strength, complexion, growth and live longer, provided if person doesn't indulge in factors which deteriorate health.

Strength is of 3 types i.e. sahaja (constitutional), kalaja (temporal) and yuktikrita (acquired). A. Sahaja bala-It is an inherent characteristic property of an individual present since birth. It is because of equilibrium state of dosas; B. Kalaja bala- It is dependent on season and age. Loss of strength is observed in adanakala, gaining of strength is observed in visarga kala and middle age is considered as full of strength and C.YuktikritaAcquired strength is dependent on healthy practices related to diet, activities etc. Performing exercises with proper methods by giving rest in between different exercises. Other says that other considered yoga as rasayana therapy. Vajikarana yogas help to acquire strength by fulfilling necessary deficiencies in deficient dhatus. Proper utilization of sense organs with their objects, normal actions and normal seasons are beneficial in the maintenance of good health. Compactness indicates healthy state of the body. Vata brings about compactness in all tissue elements of the body and promotes union of the body. Ghee is conducive to rasadhatu, shukradhatu and ojas. Ojas is the essence of all dhatus and body strength depends on ojas. Oil does not aggravate kapha but enhances body strength. Majja enhances strength and it also adds to the physical strength especially to asthidhatu. Superior quality ojas situated in hridaya and its quantity is eight drops. Other type of ojas is ordinary one and which is dwelling in vessels attached to the heart and its quantity is half anjali. Equilibrium state of kapha promotes strength, that's why normal kapha is called ojas. Functions of normal kapha are like that of ojas. Normal blood promotes strength. Wholesome food is the only sole cause for the growth of living being.

Meat of cock is strength promoter; amalaki causing rejuvenation; habitual use of ghee and milk causes rejuvenation; regular consumption of food having all tastes promotes strength; desert land is healthy land; Sweet taste, sour taste enhances strength. Strength, health, longevity and vital breath are dependent on the condition of agni. When the proper quantity of food and drinks supplied to a person which is commensurate with the power of digestion in the form fuel, which sustains the agni otherwise leads to abnormal functions. One who consumes wholesome food along with self control lives longer with proper health for one thousand and thirty six nights (100 years) and these persons are blessed by noble man.

Non violence is the best among the promoters of longevity of living beings; virya (semen) is the best among promoters of strength; knowledge is the best among promoters of nourishment; self control is the best for the promotion of delightfulness; knowledge of reality is the best among promoters of happiness; celibacy is the best among those leading to salvation.

Aims and objectives:-

Ayurveda is the preservation of health in healthy individual and eradication of diseases, which are curable. Person who is having balanced proportion of muscles, compactness, excellent sensory faculties

never suffer from diseases. These people can easily withstand hunger, thirst, heat of the sun, cold and physical exercises. Agni performs normal digestion and metabolism activities. Sama prakriti individual possesses equilibrium state of dosas, dhatus and it is considered as best prakriti. Person who is possessing excellence of all dhatus including mental faculties i.e. sarva sara are endowed with great strength, happiness and resistance to diseases.

The following persons are free from diseases consumption of wholesome diet; observation of wholesome behavior; unattached to sensual pleasures; One who donates regularly; impartial in judgment; who is always says truth; endowed with forbearing (forgiveness) nature and one who devoted to learned people. The following persons does not fall victim of diseases person possessing excellent intellect; acts and speech are leading to ultimate bliss; independent thinking or excellent faculties; clarity in understanding; full of knowledge; observation of spiritual activities and continuous yogic practices. For the maintenance of equilibrium state of dhatus the following adaptations are essential-proper use of actions and consumption of food contrary to the properties of place, time and the self; avoid over utilization, non utilization

and improper utilization of time, intellect and sense objects; non suppression of impelled urges and do not indulge in activities which are beyond one's own capacity. Dhatus grows constantly by the use of the food substances and drinks having similar qualities or dominated by such qualities. Complete uniform growth of the body takes place by following factors. Young age is the period in which complete development of body dhatus observed. Certain unseen factors favors the growth of the body naturally is called svabhava samsiddhi. Food substances possessing excellent properties and qualities for the over promotion of dhatus are considered ideal food to gain vital immune power. Avighata means absence of factors which favors deterioration of dhatus. For example, excessive indulgence in sexual acts and affliction to mental faculties brings abnormality in dosas.

The following factors which favour the promotion of strength- birth of a person in a country where people are naturally strong(For example 'sindha' region people are strong by nature); time factor which is conducive for dhatus and helps for promotion of strength. For example if person born during hemanta and shishira ritu which favors the promotion of strength; excellence among qualities of bija (sperm) and kshetra (ovum and uterus) of parents; excellence of diet; excellence of physique; excellence of suitability; all mental faculties are superior; natural mechanism; young age and exercise and such other physical activities. Habitual performance of exercise promotes strength. Always in cheerful mood is also helpful to gain strength. Normal span of life in kaliyuga is 100 years. The following factors helps to live longer upto hundred years- excellent constitute i.e. sama prakriti--prakriti sampat means person possessing equilibrium state of all dosas and it is called sama prakriti and these individuals live longer; guna sampat i.e. excellent compactness of body, excellent essence, compactness etc., natural excellent inherent qualities transformed from parents; atma sampat—righteous acts along with observation of penance, indulging in right conducts helps for longevity. Celibacy, sleeping in a place which is devoid of breeze, hot water bath, sleeping during night, physical exercises is best adjustable to all as a wholesome substance. Ojas is the essence of rasadhi dhatus and it is also called bala. Strength gives stability and maintains compactness of muscles, energy to perform all kinds of activities without any hindrances, clarity in voice and complexion, both karmendriya and jnanendriya performs their normal functions. Protection of health of healthy individual is very important. Equilibrium state of dosa, agni, dhatu, mala and their activities are normal along with proper co-ordination

between soul, sense organs and mind is called svastha. Whose joints, vessels and ligaments are properly developed with steady sense faculties and all body organs are excellent from feet to head and are better than its preceding is said to survive for longer period. Person that is free from disorders even from fetal life and gradually developing day by day with common and scientific knowledge lives longer. Collected rain water in a clean vessel mitigates all three dosas, promotes strength, rejuvenative and best for intelligence. Only the living being can enjoy desired fruit of his action. Therefore, one desirous of long life should avoid rash behavior. Avoiding all the things one has to protect his body first by using appropriate preventive measures. Shukra is the ultimate excellent outcome of food hence it should be preserved because its diminution leads to development of many diseases or even death. Person who is having control over his senses should take wholesome food in proper quantity and in proper time. Otherwise irregular dieting is the root cause for the manifestation of diseases.

DISCUSSION

Immunity is a biological term that describes a state of having sufficient biological defenses to avoid infection, disease, or other unwanted biological invasion. Immunity involves both specific and non-specific components. The non-specific components act either as barriers or as eliminators of wide range of pathogens irrespective of antigenic specificity. Other components of the immune system adapt themselves to each new disease encountered and are able to generate pathogen-specific immunity (Anonyms, 2011).

This may be correlated to vyadhiksamatwara resistance to diseases or immunity against diseases is of two kinds i.e. the one which attenuate the manifested disease and other variety prevents the manifestation of diseases. Innate immunity, or nonspecific, immunity is the natural resistance with which a person is born. It provides resistance through several physical, chemical, and cellular approaches. Microbes first encounter the epithelial layers, physical barriers that line our skin and mucous membranes. Subsequent general defenses include secreted chemical signals (cytokines), antimicrobial substances, fever, and phagocytic activity associated with the inflammatory response. The phagocytes express cell surface receptors that can bind and respond to common molecular patterns expressed on the surface of invading microbes. Through these approaches, innate immunity can prevent the colonization, entry, and spread of microbes (Anonyms, 2011). This can be correlated to

sahaja bala-it is an inherent characteristic property of an individual present since birth. It is because of equilibrium state of dosas; . Certain unseen factors favors the growth of the body naturally is called svabhava samsiddhi; birth of a person in a country where people are naturally strong. For example 'sindhya' region people are strong by nature; time factor which is conducive for dhatus and helps for promotion of strength. For example if person born during hemanta and shishira ritu which favors the promotion of strength; excellence among qualities of bija (sperm) and kshetra (ovum and uterus) of parents; natural mechanism etc. Adaptive immunity is often sub-divided into two major types depending on how the immunity was introduced.

Naturally acquired immunity occurs through contact with a disease causing agent, when the contact was not deliberate, whereas artificially acquired immunity develops only through deliberate actions such as vaccination. Both naturally and artificially acquired immunity can be further subdivided depending on whether immunity is induced in the host or passively transferred from a immune host. Passive immunity is acquired through transfer of antibodies or activated T-cells from an immune host, and is short lived -- usually lasting only a few months -- whereas active immunity is induced in the host itself by antigen, and lasts much longer, sometimes lifelong (Anonyms, 2011). This can be correlated to kalaja bala- It is dependent on season and age. Loss of strength is observed in adanakala, gaining of strength is observed in visarga kala and middle age is considered as full of strength and yuktikrita-acquired strength is dependent on healthy practices related to diet, activities etc. to develop this kind of immunity Ayurveda described many points which author described in detail in the article. A further subdivision of adaptive immunity is characterized by the cells involved; humoral immunity is the aspect of immunity that is mediated by secreted antibodies, whereas the protection provided by cell mediated immunity involves T lymphocytes alone.

Humoral immunity is active when the organism generates its own antibodies and passive when antibodies are transferred between individuals. Similarly, cell mediated immunity is active when the organisms' own T-cells are stimulated and passive when T cells come from another organism (Anonyms, 2011). Such description is not available in ayurvedic texts. According to Ayurveda immunity depends on ojas, equilibrium state of kapha and udana vata. There are two terminologies used in Ayurveda to discuss about the concept of vyadhiksamatwa (immunity) namely Ojas and bala. Diseases of immune system arise due to

disturbance in ojas, kapha, bala and udana vata. Failures of host defense do occur, however, and fall into three broad categories: immunodeficiencies (Ojokshaya), autoimmunity (Ojovisramsa) and hypersensitivities (Ojovyapat).

CONCLUSION

Vyadhikshamatva- resistance to diseases or immunity against diseases is of two kinds i.e. the one which attenuate the manifested disease and other variety prevents the manifestation of diseases. It may be correlated to concept of immunity. Sahaja bala may be correlated to innate immunity. Kalaja anad yuktikrita bala may be correlated to acquired immunity. All unwholesome food articles are not equally harmful, all dosas are not equally powerful, and all persons are not capable of resisting diseases. Over obese individual; over emaciated person; whose muscles and blood are diminished markedly; debilitated person; one who consumes unwholesome food; one who consumes less amount of food; whose mental faculties are weak; on the other hand, individuals having opposite type of physical constitution are capable of resisting diseases. Factors which contribute for vyadhikshamatva are normal dosa, equilibrium state of dhatu, normal agni, patency of srotas etc. or factors which supports the equilibrium state of all physiological parameters. Innate immunity may be correlated to sahaja bala described in Ayurveda.. Present article through light on the concept of immunity vis-a vis vyadhikshamatva. Author has collected many references regarding how to enhance immunity and keep body disease free by adopting ayurvedic principles. One who adopts Ayurveda principles in day today life will become free from diseases and can lead healthy and prosperous life.

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BREASTFEEDING PREVENTER OF PEDIATRIC LEUKEMIA

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Abstract

Cancer is leading cause of death worldwide accounting for 8.2 million deaths in 2012. It is generally accepted as a disease of adults with less than 1% of cancer in developed countries occurring in children less than 15 years. However in India where the children population compromise more than a third of the population, the proportion of cancers can be up to 5% of all cancer burden. Overall the three most common cancers in childhood comprise leukemia, brain tumors, and lymphomas. In India leukemia is the most common childhood cancer with relative proportion varying between 25% and 40%. About 60% of all leukemia's reported are Acute lymphoblastic leukemia (ALL). The causes of majority of childhood cancers are unknown and a few established casual associations (genetic/congenital or environmental) only explain small proportion of cases. Breast milk is a total food meant to exclusively supply all the nutritional needs of infants. Current recommendations of leading health organizations, including the American Academy of Pediatrics and the World Health Organization, state that "infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Breast milk contains stem cells with multilineage properties similar to human embryonic stem cells. The breastfed infant ingests thousands to millions of those cells daily. All these biological mechanisms may contribute to the protective effect of breastfeeding against childhood leukemia.

AyurvedicView :-Ayurveda since its time gives emphasis on importance of breast milk , Kashyapa says breast milk promotes growth and development and acts as tonic for all tissues.

Keyword: breast milk, stem cells, leukemia.



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INTRODUCTION :-

The word leukemia was coined by virrchow in 1847 and literally means "white blood", it was used to describe a variety of cancers of the white blood cells. Leukemia is a malignancy that arises from clonal proliferation of abnormal hematopoietic cells leading to disruption of normal marrow function. Clinical manifestation of leukemia are the result of the unregulated proliferation of malignant clone and bone marrow failure. Leukemia is most common cancer of childhood. There are main two subtypes, commoner Acute lymphoblastic leukemia (75%)

and Acute myeloid leukemia(15-20%),small proportion may have chronic myeloid leukemia (cml) and juvenile myelomonocytic leukemia(jmml).

Acute lymphoblastic leukemia (ALL) is most common childhood cancer. It contributes to one third to one fourth of all pediatric malignancy and 75% of all leukemias. It is estimated that in India each year over 6000 children <15 years of age develop ALL. There is a peak incidence of childhood ALL between age 2 to 5 years due to all associated with pre-B lineage (ref to as common ALL) . Boys are affected more than girls. T-Lineage leukemia is more frequent among older children and adolescents.

Acute myeloid leukemia also termed as acute non lymphoblastic leukemia accounts for 15-20% Of leukemia in children. The ratio of AML:ALL is 1:4, congenital leukemia have higher frequency of AML. Age incidence similar between 0-10 year and higher in teenager, AML is equally distributed among both sexes.

Currently, the causes of childhood ALL are not well known, although sex, age, race, in utero ionizing radiation, and specific genetic syndromes have been consistently shown to be associated with risk for ALL. As for childhood AML, chemotherapeutic agents and in utero and postnatal ionizing radiation are recognized risk factors, and an association has been elucidated between race and risk of childhood AML. Because ALL encompasses a heterogeneous group of molecular subtypes, independent examination of etiologic and epidemiologic factors is required for each subtype. Furthermore, the clinical presentation of these molecular subtypes is also quite varied. A possible infectious etiology for the major subtype of ALL has been suggested by Greaves, who hypothesized that c-ALL (common B-cell precursor ALL) arises as a consequence of a rare, abnormal response to a nonspecific common infection. Two separate genetic events may lead to the presentation of c-ALL: an initial spontaneous event during the expansion of B-cell precursors pre- or perinatally and a subsequent event in the same mutant clone following antigenic challenge early in life (e.g., exposure to a common, nonspecific infection and the resulting stimulation of the young child's underdeveloped immune system). Support for this hypothesis is seen in genetic back tracking of the preleukemic clone TEL-AML1, a genetic determinant of c-ALL, using newborn blood spots. Speculation has focused recently on the role of breastfeeding in protecting children from disease.

Human milk has long been recognized as providing numerous antimicrobial, anti-inflammatory, and immunomodulating agents. Many studies have shown conclusively that breastfeeding protects against acute gastrointestinal infections through transmission of maternal antibodies, macrophages, and lymphocytes. In contrast, the evidence for the protective effect of breastfeeding with regard to acute respiratory infection is still under debate. Therefore, since breast milk contains many beneficial biological factors, the Greaves hypothesis implies that breastfeeding mediates the occurrence of childhood ALL as a result of a rare, abnormal response to a common infection. To date, no similar mechanism has been suggested for the association of breastfeeding and childhood AML.

No direct reference to leukemia or its sub classifications has been definitely identified in the Ayurvedic literature, though some scholars compared leukemia with Raktarbuda / Raktapitta since certain symptoms of leukemia resemble to those given for these diseases. It can be correlated with Pandu as vitiated pitta makes dhatushaithilya (loosening of muscles) which ultimately results in the loss of ojus hence snehpana (oleation) is suggested by all Acharyas for its treatment. The main clinical picture is Anemia, Fatigue, Bleeding tendency, Fever, Arthralgia and Infection. The disease is said to be in remission when bone marrow study reveals no cluster or collection of blast cells, and normal maturation of all cellular components (i.e. erythrocytic, granulocytic, and megakaryocytic series). There should be less than 5% blast cells in the bone marrow and none have a leukemic phenotype. The persistence of dysplasia is an indicator of residual disease. The absence of a previously detected cytogenetic abnormality production of atypical immature cells (i.e. complete cytogenetic remission) confirms the diagnosis of complete remission.

ETIOLOGY

Childhood ALL, as with most other cancers, remain a disease with few proven etiological factors. Genetic and immunological factors have been implicated due to the observation of higher incidence of leukemias amongst identical twins (inheritance): amongst patients with Bloom's syndrome and fanconi anemia (genetic, faulty DNA repair); Down's and klinefelters syndrome (genetic) and amongst children with wiskott-Aldrich syndrome and Ataxia telangiectasia (immunologic). Environmental factors believed to be linked to leukemogenesis include exposure to radiation (atomic bomb), benzene, pesticides, and herbicides and chemotherapeutic drugs particularly alkylating agents and epipodophyllotoxins. Certain viral

infections have also been implicated in pathogenesis of human leukemia. Examples include Epstein-Barr virus (ALL-L3, Burkitt's lymphoma), HTLV 1 and 2 (adult T-Cell and hairy cell leukemia) and HIV (non-Hodgkin's lymphoma).

PATHOGENESIS

Acute lymphoblastic leukemia (ALL) is lymphoid malignancy believed to develop as consequence of malignant transformation of single abnormal (hematopoietic) progenitor cell that has a capability to expand by indefinite self renewal and is associated maturation arrest at that stage of differentiation. It is not exactly clear where or when the "clonal event" occurs but it may actually be highly variable. The lymphoid precursors are at high risk of spontaneous mutation because of high rate of proliferation in these cells and the intrinsically regulated mutagenic activity occurring during the process of gene rearrangement. The exact nature of these leukemogenic mutations is the subject of intensive molecular investigation. There is recent compelling evidence that suggests that in ALL, the first event may originate prenatally during fetal hemopoiesis and second event at variable time after birth. The mutational events may activate proto-oncogenes, suppress tumor suppressor genes or prevent apoptosis.

CLINICAL PRESENTATION

The symptoms depend on the degree of cytopenia:

- anemia: pallor, fatigue, tachycardia, dyspnea, occasionally- cardiovascular decompensation
- leukopenia: infections, temperature elevation

Thrombocytopenia: petechiae, mucosal bleeding, epistaxes, prolonged menstrual bleeding

Eye: bleeding, infiltration of local vessels,

CNS: at time of diagnosis less than 5% have CNS leukemia with meningeal signs (morning headache, vomiting, papilla edema, focal neurological signs)

Ear, nose, throat -lymph nodes infiltration (isolated or multiple)

-Mikulicz syndrome (infiltration of salivary glands and/or tear glands)

Skin: maculopapular skin infiltration often of deep red color (infants)

Cardiac involvement:

-leukemic infiltration or hemorrhage

-Occasionally, cardiac tamponade due to pericardial infiltration -tachycardia, low blood pressure or other signs of cardiac insufficiency

Mediastinum:

-enlargement due to leukemic infiltration by lymph nodes and /or thymus (observed in T-cell leukemia)Pleura/and pericardium: effusionKidneyenlargementLymphadenopathy

Gastrointestinal involvement: -hepato- and/or splenomegaly

HUMAN BREASTMILK STEM CELLS

Recently it has been reported that breast milk contains a heterogeneous cell population; among this, a subpopulation with stem cell properties (including the ability to differentiate into different cell lineages) has been isolated from human fresh milk . Stem cells detected in mammary gland tissue with the differentiation capacity to originate mammary epithelial cell and myoepithelial cells have been considered as the sources of stem cells in breast milk . The presence of exfoliated epithelial cells from alveoli, macrophages, and lymphocytes was also reported . It was also observed that 10-15% of the cells isolated from fresh breast milk expressed mesenchymal stem cell (MSC) markers; culturing these isolated cells led to an increase in the MSC population, due to their higher capacity of cell proliferation . Breast milk has long been known to contain maternal cells , but only recently it has been possible to distinguish, among these cells, immune cells and milk stem cells. For decades, milk was considered only from a nutritional point of view and just recently we have started to study a possible role of protective cells in breast milk. As the mammary gland is characterized by a significant remodeling during pregnancy, also the milk composition changes, not only in the nutritional elements, but also in the presence of different patterns of cells during lactation , . While the different types of cells present in the milk is known, their significance and factors influencing them are less well understood. Only few data are available regarding the human stem cell composition in the fresh maternal human milk, but some information regarding the functions and characteristics of these cells comes from in vitro and animals experimental studies. Recently, using female genetically modified mice whose cells contain a gene called tdTomato, which makes them red under fluorescent light, it has been found that in unmodified lactating mice breastfed by tdTomato, female red stem cells cross into the offspring's blood through their stomach and play a functional role later in life. When the offspring reached adulthood, red cells were found in their blood and in many of their tissues, including brain, thymus, pancreas, liver, spleen and kidneys. These data suggest a possible migration and a functional integration into organs of maternal milk stem cells in the neonate .

Breast milk comprises epithelial cells, colostrum corpuscles, polymorphonuclear leukocytes, mononuclear phagocytes, lactocytes and lymphocytes forming the main bulk of cells within two weeks of lactation. It was hypothesized that these epithelial cells are shed from the ductal and luminal epithelial layers through either a heightened turnover of the secretory tissue, or as a consequence of the mechanical shear forces associated with the continued filling and emptying cycle associated with breast milk synthesis and lactation.

Functions of Breast Milk Stem Cells

Breast milk stem cells with multilineage properties were only recently discovered, and although rapid progress was made in the field in the past few years, we are still far from fully understanding their properties and function in the breast during lactation and for the breastfed infant. In both cases, indirect evidence supports the notion that they play critical roles. In the mammary gland, they appear to be important during its remodeling toward a milk-secretory organ, as is suggested by the higher expression of pluripotency genes during pregnancy, when epithelial expansion occurs, and the rarity of these cells in the resting breast. In the infant, the substantial number of these stem cells ingested daily during breastfeeding (thousands to millions) implies a function. In animals, including a primate model, it was shown previously that immune cell populations from milk remain unharmed in the digestive tract of the young and through diapedesis they cross the intestinal mucosa and enter the bloodstream through which they migrate to different organs, where they provide active immunity. We proposed that breast milk stem cells may have a similar fate in breastfed offspring. Dutta and Burlingham (2010) demonstrated a correlation between nursing and the number of maternal cells in the liver of mouse pups, suggesting seeding of maternal cells into the liver via breast milk; however, the nature of the transmitted cells was not determined. Earlier this year, we presented the first evidence showing breast milk stem cell survival in the gastrointestinal tract of the offspring, transfer to the bloodstream, and in vivo integration into different tissues. This now supports the notion that breast milk imparts the mother's stem cells to the infant, where they potentially function to boost infant development early in life.

This phenomenon is called microchimerism, whereby maternal cells, with all their genetic material and other constituents, are present in the offspring and may remain there alive long-term. Maternal microchimerism is known to occur in utero when stem cell exchange between the mother and the embryo is facilitated through the placenta, with the exchanged cells

surviving in the chimeras for several years . This cellular transfer that starts in utero appears to continue after birth during the breastfeeding period, and may facilitate further development of tolerance between mother and infant. Indeed, the higher acceptance of maternal transplants by individuals who were breastfed as infant supports the establishment of a special communication and tolerance between the mother and her infant during breastfeeding, which is above and beyond what has already been established in fetal life. This tolerance may contribute to the utilization of other breast milk components by the infant and appears to have long-term status and benefits. Breast milk stem cell research is unraveling unknown attributes of breast milk far beyond its role as a food source that merit further inquiry.

Several studies have been conducted regarding breastfeeding and its preventive role in childhood leukemia, through the stem cells present in it. A childhood peak of common acute lymphoblastic leukemia at age 2–5 emerged in the early 20th century in developed countries. To explain these temporal trends and drawing on animal models and molecular evidence, Greaves¹⁰ hypothesized that childhood common acute lymphoblastic leukemia may arise as a result of delayed exposure to common infections until the ages represented by the childhood peak (when lymphocytes may be more vulnerable to spontaneous mutations) or because of a failure (in more developed countries) of appropriate immune-modulating infectious exposures in infancy. Furthermore, Greaves proposed that breast milk may play an important role in the prevention of childhood leukemia by actively stimulating or modulating the immune system and promoting its development in early life. The immunomodulating properties of breast milk could modify the immune response to common infections experienced at the ages represented by childhood peak.

DISCUSSION

The etiology of childhood leukemia is an important epidemiological and public health question. Breast milk is a live substance, containing antibodies and having a prebiotic effect that promotes a healthy microbiome in the intestines, some specific to the baby such as antibodies to pathogens to which each baby's mother was exposed. Breast milk contains many immunologically active components and multifactorial anti-inflammatory defense mechanisms that influence the development of the immune system of the breastfed infant. Breastfeeding provides the neonate with considerable amounts of secretory IgA antibodies directed particularly against the microbial flora of the mother and her environment.

Lactoferrin in breast milk can also destroy microbes and reduce inflammatory responses as do the oligosaccharides that block attachment of microbes to the infant's mucosa, preventing infections.

The introduction of infant formula to babies' diets changes the infants' gut microbiome, thus affecting the response of the infant immune system to pathogens. A greater amount of natural-killer cells, suggesting a more mature immune system, have been found in breastfed infants than in formula-fed infants. In addition, pH level in the stomach of breastfed children is better for the promotion of the protein-lipid α -lactalbumin (termed HAMLET), which induces apoptosis like death in tumor cells.

A discovery was made that breast milk contains stem cells with multilineage properties similar to human embryonic stem cells. The breastfed infant ingests thousands to millions of those cells daily. Based on animal models, including a primate model, it is hypothesized that the cells remain unharmed in the digestive tract of the infant then enter the bloodstream, migrate to different organs, and there provide active immunity.

All these biological mechanisms may contribute to the protective effect of breastfeeding against childhood leukemia. Infant formulas cannot mimic the array of protective properties of breast milk, which fits the infant both species-wise (eg, human milk vs cow milk) and individually owing to the dyadic connection between a mother and her baby.

CONCLUSION

Thus from the above review article it is concluded that breast milk has several cellular factors that prevent the offspring from childhood leukemia. Exclusively breastfeed child has lower risk of childhood leukemia.

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USE OF SHUNTHI IN AMAVAT

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Abstract

According to WHO Rheumatic or musculoskeletal conditions comprise over 150 diseases and syndromes, which are usually progressive and associated with pain. They can broadly be categorized as joint diseases, physical disability, spinal disorders, and conditions resulting from trauma. Musculoskeletal conditions are leading causes of morbidity and disability, giving rise to enormous healthcare expenditures and loss of work. Rheumatoid arthritis is a type of autoimmune disease, which affects day today life. It affect physically and mentally too, in Ayurvedic term we can say Amavat, cause due to Aam. In this Disease formation of Aam mixed with Aggravate vata and kapha dosh. In Amavat specially joints causing Swelling, Severe Pain, Stiffness, etc. According to modern system Amavat clinically correlate with Rheumatoid arthritis, it is an autoimmune inflammatory disease.

Keywords: Aam- Amavat- Shunthi- Rheumatoid arthritis- Autoimmune disease.



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Introduction:

Ayurveda is an ancient system of life (ayur) knowledge (veda) arising in India Thousands of years ago. Ayurveda theory evolved from a deep understanding of creation. The great rishis or seers of ancient India came to understand creation through deep meditation and other spiritual practices. The rishis sought to reveal the deepest truths of human physiology and health. They observed the fundamentals of life, organized them into an elaborate system, and compiled India's philosophical and spiritual texts, called Veda of knowledge. Happiness and longitivity of life are major aim of Ayurveda. Main objective of Ayurveda is to maintain healthy lifestyle.

Aam is one of the basic concept of Ayurveda which is responsible for many diseases. Aam is the Immature nutritional essence formed in the stomach due to sluggish digestion(agnimandya and ajeerna), with characteristics of Avipakvam(unprocessed), Asamyuktam(disintegrated), Durgandham(foul smelling), Bahu pichchilam(very sticky), sadanam sarvagatrani(cause weakness of all the body parts). Aam combined with dosh and

spread all over the body. Properties of Aam are guru(heavy), sheet(cool), pichchil(sticky), etc. which cause dhatuagnimandya. Amavat is one of the common disease in present era which is mainly due to improper food and lifestyle. It comes under rasavaha srotas vyadhi. In Amavat aam is carried by vayu and travel through the body and accumulate (sthanasanshrya) in the joints at weaker site (khavaigunya). The symptom arises like swelling and pain in the joints. It is yapyva vyadhi difficult to cure. for this type of chirkari vyadhi we have to take long term medication like steroid, anti-inflammatory, Disease-modifying anti-rheumatic drugs (DMARDs), Non steroidal anti-inflammatory medications (NSAID), Analgesics (painkillers), etc. which causes huge side effects in modern medicines. But in Ayurveda there are no side effects in long term medication.



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The prevalence of Rheumatoid Arthritis was studied in the adult Indian population. As the first step, a house-to-house survey of a rural population near Delhi was conducted by two trained health workers. The target population comprised 44,551 adults (over 16 years old). The health workers identified the possible cases of rheumatoid arthritis (RA) using a questionnaire. These cases were then further evaluated by the authors using the 1987 revised ARA criteria for the diagnosis of RA. A response rate of 89.5% was obtained and 3393 persons were listed as possible cases of RA by the health workers. Of these, 299 satisfied the revised ARA criteria for the diagnosis of RA, giving a prevalence of 0.75%. Projected to the whole population, this would give a total of about seven million patients in India. The prevalence of RA in India is quite similar to that reported from the developed countries. It is higher than that reported from China, Indonesia, Philippines and rural Africa. These findings are in keeping with the fact that the north Indian population is genetically closer to the Caucasians than to other ethnic groups.¹

Incidence of Rheumatoid

Rheumatoid Arthritis may be genetically inherited. It is also suggested that few environmental factors trigger the immune system in risky individuals.

Smoking, obesity and chemical exposures like pollution, insecticide, and few cosmetics may increase the risk for rheumatoid arthritis.

Women are more susceptible for Rheumatoid Arthritis and it commonly begins between the ages of 40 and 60 years.

Hetu(cause)s of Amvat-

- Indulgence in incompatible foods and habits.
- Excess of physical activity immediately after taking fatty foods.
- Those with poor digestive capacity.
- Use of food and drink, which are heavy to digest.
- Use of food, which is rough, cold, dry, unclean, antagonistic in nature.
- Emotional factors such as passion, anger, greed, confusion, envy; grief, excitement, fear etc.
- Is responsible for Amavata.²

Classificatin of Aamvat:

1. Vataj - Where vata is predominant (pain is severe in this type).
2. Pittanubandhi - Where pitta is predominant (burning sensation and redness of the affected joints is present).
3. Kaphanubandhi - Where kapha is predominant (loss of movement and itching is seen in this type).³

Symptoms⁴: Initially symptoms appear like,

1. Angamarda- pain in body parts
2. Aruchi- anorexia, tastelessness
3. Alasya- lethargy
4. Gaurava- heaviness of body
5. Jwara- fever
6. Apaka- indigestion

Cardinal symptoms of Aamvat:

1. (Vrisick damshavat vedana) Morning pain severe in nature

2. (Sanchari Vedana) shifting pain
3. (Stambha) stiffness of joints
4. (Jwara)Increase temperature
5. (Karmahani) loss of movements
6. (Sandhi Vikruti) joint deformity
7. (Kshudhamandya) Loss of appetite

Samprapti of Aamvat ⁵:

- The person who have suffering from Mandagni (poor digestive capacity) if is indulge in incompatible foods habits, lack of physical activity or doing exercise after taking fatty foods are prone to develop amarasa (improperly digested food) in their body.
- This Aam associated itself with vata moves quickly to the different seats of sleshma in the body (mainly joints), filling them and the dhaminies (Blood vessels) with picchila (sticky material).
- by this way the bad end product of digestion associated with pitta and kapha assuming different colours and blocks the tissue pores (strotansi) and passages with this picchila (sticky) material.
- the stasis of the vitiated doshas and dushya along with ama in the sleshmashaya is taken as sthanasamsarya stage of samprapti.

Samanaya chikitsa siddhant of Aamvat according to yogratnakar ⁶:

- Langhana (fasting)
- Swedan (Fomentation)
- Katu-tikta-deepan-bitter medicines for promoting digestive power
- Virechan (Purgatives)
- Snehpana(Ingestion of unctuous substances)
- Basti (Enema).
- Dry fomentation using sands like dry substances
- Upanaha(Loal application of unctuous substances)

Chikitsa of Aamvat with the help of Shunthi:



Sanskrit name: shunthi

Latin Name : Zingiber officinale

Family : Zinziberaceae (Ardrak kula).

Synonyms: Mahaushadha, Vishwabheshaja, Shrungavera etc.

Local name: Sonth(in dry form), Ardrak(in wet or fresh form)

Rasa: Katu (Pungent) , Guna: Laghu (light)

Virya: Ushna, Vipak: Madhur

Dosha Karma: Kapha Vaata Shamak

Gana: Shunthi is included in gana like,

- According to Charak- Triptighna, Arshoghna , Deepaniya, Shulaprashamana, Trishna nigrahan.
- According to Sushruta- Pippalyadi, Trikatu
- According to Bhavprakash- Panchakola, Shadushana

Why Shunthi ?

- Shreshtha aam pachak (Shunthi is one of most Important dravya which is indicated for pachan.)
- cost effective dravya
- Palletable
- Easily available
- Shreshtha Shulprashaman, shothahar, vedana sthapan

Formulations of Shunthi-

- Shunthi siddha jal- can be use insted of normal drinking water. to improve pachan and deepan.

- Shuntyadi kwatha- Decoction of shunthi(ginger) and gokshur(tribulus terrestris)50mi BD⁷
- Shunthi guda churna- Powder of shunthi(ginger) taken with powder of guda(jaggery)
- saubhagya shunthi pak- Prepar paste of shunthi put the same in ghee ,cow milk and raw suger trikatu, triphala, white cumin seeds, cinnamon, smaller cardamom, cassia leaves, nagkeshar, musta, jatikosa, jatiphala, coriander, clove, nalika, yamani, ajamoda, flowers of dhataki, shatavari, musali,lodhra, gajapippali, chiraunji, guduchi satva, etc. Should be taken during morning hours in doses of 6-12 gm. Along with milk of cow or goat as anupan⁸.
- shunthi putpak- Prepare paste of ardrak in juice of erandamoola and then give putpak to same. Then extract the juice after it is cooled down and take it with honey. dose is 2-4 ml vyan-udan kal (after food)
- shunthi sura- use for better digestion.
- shunthi panak. Use as best deepan and pachan.
- Shunthi lape –Local application of paste of shunthi
- Shunthi churna udvartan- local application of powder of shunthi etc.

Contraindication of Shunthi:

- In Ekantik pitta prakruti
- Grishma ritu
- Burning in epigastric region
- Peptic ulcer
- Burning micturation
- Bleeding Disorder
- Anemia etc.

Pathya Apathya⁹:

Aahar-vihar that does not adversely affect the body and mind is wholesome. The body includes dhatus, dosa as well as their channels. The purpose of intake of wholesome diets etc., is to maintain normal health and alleviate the various diseases.

Aamvat	Pathya	Apathya
Aahar	Yava (barley), kulattha (horse gram), raktashali (rice), vastuk, shigru (drum sticks), punarnava, karvellak (bitter gourd), parawar, ardrak (ginger) rasona or ginger (shodhit with takra) jangal mansa (meat). Intake of hot water	flour of mash (black gram), sweets Fast food, uncooked food, salty, spicy, oily food Fish Cold water, Curd, , jaggery, milk, cold beverages ,ice creams
Vihara	Pranayam, meditation Hot water bath	Daytime sleeping, vegavadharan (suppression of natural urges); exposure to cold, wind, A.C.; excess of stress.

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yogratnakar

Bhavprakasha

Bhaishajya Ratnavali/Sutikaroga/29-36

Yogratnakar

**AN AYURVEDIC REVIEW OF INFERTILITY: ETIOLOGICAL FACTORS,
CLASSIFICATION AND TREATMENT**

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Abstract

Infertility is a common problem found in today,s world. Change in lifestyle, food habits and activities are the main causes of this problem, in both males and females. People need to give this a serious thought, .so it is need to think about that. Infertility is not considered as a disease in Ayurveda. However it is considered as a symptom showing changes in various body conditions, physical and mental. Ayurvedic literature explains etiology, classification, clinical features and treatment of infertility very well. Afterall life process can be best handled by treatments from Ayurved.

Keywords: Infertility, Ayurved Classification, Treatment



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Introduction:

Infertility is not considered as a disease in *Ayurveda*. However it is considered as a symptom showing changes in various body conditions, physical and mental. In *Ayurvedic* classics many reasons, symptoms and treatment are explained for 'Prajaprapti'. Acharyas have given various points while explaining causes of 'Prajaprapti'. Intercourse with an old, very young and diseased woman; intercourse in abnormal posture; diseases of *Yoni* or abnormalities of *Artava* means menstrual disorders results in infertility. In *SushrutSamhita* mentioned twenty *Yonivyapad*, one of them is 'VandhyaYonivyapad'. Maharshi Charaka while explaining 'Bijanshdushti' has mentioned 'Vandhya'. In *KashyapaSamhita* infertility has explained in *Jatharini* like 'PushpaghniJatharini'. In later classic like *HaritaSamhita* explains diagnosis, classification, clinical features of infertility in detail.

Etiology :

Ritu, Kshetra, Bija, Ambu, ManasikSthiti i.e. ovulation, healthy uterus and passage, ovum and sperm, nutrient fluid or hormones, psychological condition respectively and *Hridaya, Shadbhawas* i.e. *Matrij, Pitrij, Satvaj, Satmyaj, Aatmaj* and *Rasajand* properly functioning *Vayu* are the important factors for conceiving. Conceiving may not be possible in case if there is a problem with any of these factors.

MaharshiCharaka has given following reasons for late conceiving in fertile woman :

Yonidosh : Congenital abnormality in female reproductive system. *Yonivyapad* means gynaecological disorders, if not treated timely, can cause infertility. In *Yoniroga*, disease like *Yonarsha* can cause amenorrhea resulting in infertility. Injury to *ArtavavahaStrotasa* means injury to female reproductive organs like uterus, fallopian tubes, ovaries etc. can cause infertility. *Garbhakoshbhanga* means uterine prolapse which may cause delay in conception or infertility. *Bhagasankoch* means constriction of vulva or vagina which may cause infertility. As per *Ayurvedic* classic, *Bhagasankoch* can happen if intercourse is done with a very young female. *SphalitaMutratva* means flopping stream urination which may cause infertility. *SphalitaMutratva* may occur due to obstruction of urethra in gonorrhoeal urethritis.

ManasikAbhitap : Mental health of male and female is very important factor for fertility. Stress, scare, sadness etc. hamper process of impregnation. Happiness is a very important emotion / mental condition required to conceive.

Shukradosh : It means abnormalities of sperms along with spermatic fluid and it can cause infertility. Out of *Shadbhawas*, sperm carries *Pitrujbhawa* and any abnormality related to sperms can cause delay in conception or infertility.

Asrikdosh : *Asrik* means ovum, menstrual blood or ovarian hormones. Out of *Shadbhawas*, ovum carries *Matrijbhawa*. Abnormality in ovum and / or ovarian hormones may cause infertility.

Aahardosha : Healthy diet is very important for conception. Dietetic abnormalities can cause loss of *Dhatus*, influence hormones, vitiate *Doshas* and in turn cause gynaecological disorders. It can even hamper nourishment of fertilized egg. Healthy diet nourishes whole body, saves it from any abnormalities and hence makes it more fertile.

Vihardosha: It means abnormal mode / way of life. Suppression of natural urges and wrong / abnormal modes aggravates *Doshas* thereby producing various gynaecological disorders. They may also prevent proper entry of sperms due to faulty deposition of seminal ejaculate.

Akalayoga: *Akalayoga* refers to either age of female inappropriate for conception or period before and after ovulation. A female cannot conceive before menarche and after

menopause. Having intercourse in such age cannot result in conception. Similarly, a female cannot conceive due to absence or destruction of ovum, before or after *Ritukala*.

Balasankshaya: It means loss of physical strength or capacity to conceive. Few women cannot conceive before menopause due to loss of capacity to conceive. This strength or capacity depends mainly on *Dhatu*.

Classification and Clinical Features:

Types of infertility (*Vandhya*) are explained only in *HaritaSamhita*. In *CharakaSamhita*, while explaining etiology of *Vandhya*, word *Sapraja* is found; the word *Apraja* is found in clinical features of *AsrijaYonivyapad*. Word *Vandhya* is found while explaining congenital abnormalities such as absence of uterus and *Aartava*. *Sapraja* means secondary infertility while *Aprajacorelates* with primary infertility and *Vandhyacorelate* with sterility.

According to *HaritaSamhita*, there are six types of infertility as follows :

1. *Kakavandhya* : After giving birth to first child, if a female is not able to conceive, it is called as *Kakavandhya*.
2. *Anapatya*: If a female is not able to conceive for the first time, it is called as *Anapatya*.
3. *Garbhastravi*: If recurrent abortion is found in a female, it is called as *Garbhastravi*.
4. *Mrutavatsa*: Recurrent still births from a female is called as *Mrutavatsa*.
5. *Balakshaya* :Loss of capacity to conceive is called as *Balakshaya*.
6. *Ajatarajasa* means a girl undergoes intercourse before menarche resulting in constriction of vulva and vagina i.e. *Bhagasankoch* ultimately resulting in infertility.

Prognosis :

Curable :*Apraja* and *Sapraja* from *CharakaSamhita* are curable. According to *KashyapaSamhita*, *Pushpaghni*, *Andaghni*, *Durdhara* and *KalaratriJataharini* are curable. According to *HaritaSamhita*, *Anapatya*, *Kakavandhya* and *Balakshaya* are curable.

Difficult to Cure :*AcharyaKashyapa* says that, *NakiniJataharini* is difficult to cure and according to *Harita*, infertility occurring due to intercourse with *Ajatarajasa* is difficult to cure.

Incurable :According to *MaharshiCharaka*, *Vandhya* due to congenital abnormalities such as absence of uterus and *Artava* is incurable. According to *Kashyapa*, *VashyaJatharini* is incurable.

Treatment :

Principles :

If the diseases, such as *Yoniroga*, *Shukraartavadosha*, *Garbhakoshabhanga* etc., due to which infertility has occurred are cured, infertility will also get cured. *Aacharya* say that pregnancy occurs in healthy *Yoni* only.

NidanParivarjan means avoiding etiological factors such as faulty diet and mode of life, ill mental health etc.

If infertility occurs due to loss of strength, then use of *Balavardhak* and *Brihandravya* helps to treat infertility.

Snehan, *Swedan*, *Vaman*, *Virechan*, *Aasthapan* and *Anuvasan* should be done in the exact order, then male partner should be medicated with *Madhursiddhaksheera* and *Ghrita* and female partner medicated with *Taila* and *Masha* etc, says *Kashyapa*.

Anuvasana and *NiruhaBasti* helps in treating infertility due to Vitiated *Vayu*, oligomenorrhoea, amenorrhoea, scanty menstruation and unovulatory menstruation.

Specific Treatment :

Drugs for external use :

1. *NarayanaTaila*, *ShatpushpaTaila* are used for *Nasya*, *Abhangya* and *Basti*.
2. *LashunTaila*, *ShatapakaTaila*, *TrivruttaSneha*, *BalaTaila* are used for *Basti*.
3. *Shatvaryadi* and *GuduchyadiRasayan* are used for *Basti*.
4. *Sahacharadi* and *MustadiRasayan* are used for *YapanBasti*.
5. *JivantyadiRasayan* is used for *AnuvasanBasti*.

Drugs for internal use :

1. *ShatpushpaKalpais* used in infertility.
2. *YogarajGuggul* is used in one *shanmatra* results in pregnancy.
3. *MaharasnadiKwath* is beneficial in infertility.
4. *Narayan Taila*, *ShatavariTaila*, *BalaTaila* and *ShatpushpaTaila* are used orally to help improve fertility.
5. *Laghuphalaghrita*, *Phalaghrita*, *Kamdevaghrita*, *Paniyakalyanghrita*, *Shitakalyanghrita*, *Bhruhatashatavari/ Shatavarighrita* and *Lashunghrita* are used orally.

Pathya-apathya :

A female consuming *Lashunacana* never become *Vandhya*. It means that *Lashuna* should be used to treat infertility. Having milk is beneficial as well as having meat also helps to improve nourishment.

Kachchar, Surana, Amla, Kanji, Vidahi, Tikshnadravya are non-congenial articles and one must avoid these. *Vandhyakarkatakimula, Langali, Katutumbi, Devadali, Bruhatidwaya, Suryaballi, Bhiruka* are congenial ones, so use these drugs.

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AN ARTICLE ON AYURVEDICVIEW OF CHILDHOOD OBESITY

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INTRODUCTION:-

Life style diseases (also sometimes called as diseases of longevity or diseases of civilization.)are the diseases that appear to increases in frequency as the countries become more *industrialized and* globalized.

Obesity is the most common pediatric health problem in developed as well as developing countries. Diet and life style are the major factors influencing the susceptibility to many diseases like Type-2 DM, heart and kidney disease, O.A etc thus increasing the mortality rate.

According to WHO obesity is defined as follow:- 1. BMI greater than or equal to 25 is over weight. 2. BMI greater than or equal to 30 is obese. When the child is on his 97th centile is said to be over weight where as , when the child is on his 120th centile is said to be obese.

The etiological factors are over eating or eating junk food, lack of physical activities, improper sleeping patterns etc. These etiological factors are responsible for *Agnidushti* thus affects the *MedaDhatvaagni*. Thus, leading to *strotorodh* of *Meda dhatu* and vitiating *Vata* and *Kapha dosha* and resulting in *Sthaulya* or childhood obesity.

In the prevention and management of childhood obesity one must rule out hormonal imbalances, genetic disorders etc.

In this lifestyle oriented disorder, *Ayurveda* plays a vital role. According to *Ayurveda* *Agnidushti* is the main cause of obesity. It can be treated by internal medications and panchkarma therapies. Also, a bit change in diet and lifestyle and dietary habits will help in curing obesity in children and thus preventing the further consequences.

PURPOSE:-

Obesity prevention is an international public health priority. Change in diet, following *Dinacharya, Rutucharya* along with panchkarma therapies and internal medications helps in the management of childhood obesity and thus overcoming further consequences.

MATERIALS AND METHODS :-

REVIEW OF LITERATURE:-

The *Ayurvedic* perspective of *Sthaulya* or *Medoroga* is collected from *Ayurvedic* classics, where as the matter of childhood obesity is collected from books of Pediatrics in modern science.

AYURVEDIC VIEW:-

Sthaulya or *Medoroga* according to *Charaka Samhita* is described as one of the *Ashtaunindita* (8 most criticized disease). The etiological factors of *Sthaulya* in children are over eating or overfeeding by parents, Lack of physical activities, improper dietary habits like intake of junk food, unhealthy food items and improper sleeping patterns.

In *ayurvedic* terminologies these etiological factors are *kapha dosha* propogating *guru, snigdha, adhyashana, atyashan, atinidra and avyayam* .According to *Vagbhata Samhita*, the characteristics of *Sthaulya* or childhood obesity is described as pendulous movement of buttocks, abdomen and breasts while walking (*Nitamb, Stana and Udara lambanam*). This pendulous movement is due to deposition of excessive *Meda* and *Mansa dhatu*(Fats). Further *Sthaulya* is associated with excessive foul smell sweating(*sweda durgandhi*) from axilla and having bad body odour (*gatrangandha*).

The pathogenesis of *Sthaulya* occurs due to etiological factors which results in vitiating *kapha* and *vata* dosha further leading to *Agnidushti*(resembles abnormal increase in appetite and food absorption). Later due to *medadhatvaagnimandya medovaha strotasget* obstructed (*strotorodha*). Thus, leading to increase in *dushta Meda dhatu* (unwanted fats deposition) and the child is becomes *sthoor* or obese.

In *Sthaulya* or childhood obesity Ayurveda plays an important role. The management of *Sthaulya* include following:-

1. Change in dietary habits without hampering the growth and development of the child.

It includes various Ayurvedic recipes that can be served to a child either in the form

of supplements or snacks eg avoid drinking excessive water, chilled water, having Luke warm water daily instead of normal water.

2. Changes in the life style of parents so that of children. That is, following proper sleeping patterns, avoiding sleeping at the day time and regular physical activities.
3. Internal medications like *Shivagulika, Navak guggul, Takrarishtha, Lohasava, Punnarva mandoor, Dashmool kwath, Trifala kwath* etc.
4. Panchkarma therapies like *Ruksha Udvartana, Snehana, Swedana , Lekhan basti* above 12 yrs of age is useful in the management of *Sthaulya*.

AYURVEDICAYURVEDIC PERSPECTIVE OF CHILDHOOD OBESITY :-

Ayurvedic Perspective of childhood obesity include the change in the dietary habits of children by adding Ayurvedic recipes as supplements which will indirectly help in controlling weight by improving *Agni*. Secondly, changes in life style like Lack of physical activities, improper sleeping patterns can be improvised by counseling.

Children should get all the essential nutrients from food as it is very much important for their overall growth and development.counseling

Without changing the dietary requirements one can give food items in the form of supplements which can help in reducing and controlling weight

Some of the *Ayurvedic* recipes which helps in reducing weight are as follows :-

1) *Madhudak Prayoga (Chakradatta)* :-

Ingredients :- Honey, Lukewarm water.

Preparation :- Take 250ml of lukewarm water and add 1spoon of Honey to it.

Dose :- Daily 150-200ml of water early morning empty stomach.

Duration :- 6 months.

Actions- It helps in dissolving and liquefying the unwanted *Meda dhatu* without affecting any of the *doshas*

2) *Manda Prayoga(Chakradatta)* :-

Ingredients :- *Puran shali*(rice), water(14times), *Sauwarchal*.

Preparation :- 1 cup of *puran shali* to which add 14 times of water and is cooked on the low flame gas, *sauwarchal* is added to taste. The flame is stopped once the *puran shali* are cooked evenly.

Dose :- ½ - 1 bowl on demand.

Caution :- To be served warm or lukewarm.

Action :- Helps in correcting Agnidushti and *Medagni vardhan* .

3) ***Sattu Prayoga (Chakradatta)***:-

Ingredients :- Initial stage of curd i.e. curd water or *mastu* , *Sauwarchal*, *Panchakol*, *Hingu*, Honey.

Preparation :- Curd water or *mastu* is taken in bowl to which *Pachakol*, *Sauwarchal* is added as per taste, for palatability honey is added as per requirement. It is evenly mixed.

Dose :- ½ - 1 bowl on demand.

Caution :- To be served with lukewarm water, Avoid serving at night.

Action :- It helps in correcting *Agnidushti* and also overcoming obesity.

4) ***Eranda kshara Prayoga(Bhaishajya Ratnawali)*** :-

Ingredients :- All parts of *Eranda*(*Ricinus communis*), water.

Preparation :- All parts of *Eranda* are burnt evenly to which 4 times water is added and is kept overnight. Later the above clear water is discarded and the desired quantity of water is added to the blackish colour ash.

It is uniformly mixed. It is then allowed to settle for next 6-8 hours. The settled mixture is then heated on a low flame in such a way that the water is evaporated. At the end, white coloured ash is seen and it is collected accordingly. This *Eranda Kshara* is given with *ghrita bharjita Hingu* in a *Manda* or *sattu Prayoga*.

Dose :- 1 – 5 mg with *Manda* or *sattu prayoga* on demand.

Action :- Corrects *Agnidushti*, *Vata &Kapha dosha* and also reduces unwanted fats.

5) ***Triphala kwath(Yogaratnakara)*** :-

Ingredients :- *Triphala (Haritaki, Bibhitaki, Amalaki)*, water, Honey

Preparation :- *Triphala* in their coarse forms are taken & to which 16 times water is added. It is then kept on low flame in such a way that only 1/4th of the water remains. The *Kwatha* or decoction is then cooled. Honey is added for palatability.

Dose :-5 - 15ml/day can be given in the form of health drink 1 or 2 times a day.

Action :- *Triphala* itself is indicated in *sthaulya* as it does *Karshana*.

6) ***Falatrikadi Churna (Yogaratnakara)*** :-

Ingredients :- *Triphala, Trikatu (Shunthi, Maricha, Pippali)* , oil, *Sauwarchal*, Honey.

Preparation :- All the *Churnas* are mixed uniformly and to which oil, *sauwarchal* is added. Honey is added for palatability.

Dose :- 125 - 500mg daily once.

Duration :- 6 months.

Action :- It helps in correcting *Meda dhatu* and *kapha, vata dosha*.

7) *Moog, Kultha, Rice* in the form of *peya, vilepi, Akruta, Kruta Yosha*, can be given to children by adding *sauwarchala* to it.

8) **Importance of water in *Sthaulya* (Obesity):-** *Acharya Vagbhata* in his *sutrasthana* has mentioned the importance of water. When water is drunk before meal it helps in reducing weight. Where as, when water is drunk in the middle of the meal, it helps in maintaining the weight and normal body posture. But, When Water is drunk after the meal, it leads to weight gain.

9) Routinely having Luke warm water helps in reducing and controlling weight gain.

10) Appropriate oral intake along with physical exercise i.e. cycling, swimming, outdoor games etc. along with following *Dincharya and Rutucharya* helps in preventing hazards of childhood obesity.

11) **Do's and Don't's :-**

Do's :-

1. Physical activity like cycling, swimming, outdoor games etc

2. Above mentioned preparation, Milk, Ghee, Jawar, Bajara, Nachani, Moong Khichadi, Buttermilk, Sita, Soups, Brinjal, Daliya, Have water before lunch and dinner, Lukewarm water.

Don't's :-

1. Indoor games, sedentary lifestyle.

2. Junk food, over eating, paneer, cheese, chilled beverages, Jaggery, sugar, fermented food items, milk products, excessive water, water after lunch and dinner, wheat, Maida, sabudana, etc.

DISCUSSION:-

Hormones also play an important role in obesity. For treating childhood obesity, one must rule out the hormonal imbalance, genetic disorders etc. Management of childhood obesity is

done by treating *Agnidushti*, *Strotorodh* of *Meda dhatu* and by subsiding the vitiated *vata* and *kapha dosha*, Where as the prevention of childhood obesity can be done by following seasonal regimens, daily regimens, proper dietary habits and proper change in lifestyle as mentioned above and also by taking internal medications along with panchkarma therapies. Panchkarma therapies play important role in reducing weight and also help in controlling weight gain .

CONCLUSION :-

Obesity is the non-communicable disease. Making healthier choice of diet and changes in lifestyle not only help in controlling weight gain but also help in increasing metabolism. Thus, *Ayurvedic* management helps in controlling the weight and reducing the incidence rate of childhood obesity.

Children being the future of nation. Management and prevention of childhood obesity is the need of an hour.

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THE ROLE OF YOGA IN ACUTE LOW BACKACHE

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Abstract

Mechanical low back pain is one of the major 21st century adversity, and 2nd leading cause of disability. Back pain is a common health problem, with more than 50% of adults bothered by it each year and 70% to 80% of adults afflicted by it at some time in their lives. Yoga offers a holistic approach to health and is now considered a form of mind-body medicine within complementary and alternative medicine. Physiotherapists are beginning to recognize yoga as a form of treatment for musculoskeletal and cardio respiratory conditions.

Objective: The objective of the study was to compare effectiveness of yoga and exercise therapy in the management of mechanical low back pain. **Method:** Total 60 subjects with mechanical low back pain were divided in to two groups. Yoga group and exercise group. Yoga group underwent yogic counselling, asanas, and instant relaxation technique and exercise group underwent educational talk, strengthening exercises, and supine rest. Subjects evaluated for disability and flexibility with Roland Morris Disability Questionnaire and sit and reach box test respectively. Data was collected at baseline and at 4th & 8th week. **Results:** Yoga and exercise therapy both showed a significant reduction in disability and improvement in back flexibility. **Conclusion:** Yoga and exercise therapy both are effective in the management of mechanical low back pain.

Keywords: Yoga, exercise, backache



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INTRODUCTION

Mechanical low back pain is the general term that refers to any type of back pain caused by strain on muscles of the vertebral column and abnormal stress. Mechanical low back pain is characterized by increased pain with motion and decreased pain with rest, whereas the pain of non-mechanical low back pain generally occurs at rest and is less affected by motion. The surrounding ligaments, muscles and facet joints may become irritated and inflamed. People with mechanical back pain experience pain primarily in the lower back, the pain can also radiate to the knees, thighs or buttocks. This is called sciatica, namely nerve pain from irritation of the sciatic nerve.

There are 3 types of mechanical low back pain, i.e. acute, sub-acute and chronic characteristics/clinical presentation of mechanical low back pain is usually aggravated by

long levered activities, lifting heavy objects, levered postures (bending forward), static loading of the spine (prolonged sitting or standing) it's difficult to reliably identify by diagnostic testing. These typically involve processes in the muscles and/or ligaments. Common causes of mechanical back pain include spinal stenosis, herniated discs, joint pain, discogenic pain, vertebral fractures, sacroiliac joint pain, and myofascial pain. A wide variety of treatments are available, with different treatments specifically targeted toward different causes. A balanced approach, which takes into account patient psychosocial factors and incorporates multidisciplinary care, increases the likelihood of success from back pain interventions .mechanical low back pain are many, but none are convincingly causal. Probable risk factors include genetic factors, age, smoking, back pain history, job dissatisfaction, heavy physical work, static work postures, lifting, vibration, obesity, and psychosocial factors.

Riskfactors also have been associated with the work related back pain. Physical work factors include heavy manual work, lifting and twisting, postural stress, whole body vibrations. Psychosocial work factors include monotonous work, lack of personal control, low job satisfaction. Physiologic factors includes low physical fitness, inadequate trunk strength and health behavior which includes smoking. MLBP symptoms and signs were pain when lifting; intermittent pain during day; pain that develops later in the day, pain on standing for a while, with lifting, bending foreword a little, on trunk flexion or extension, when driving long distance, and getting out of chair, pain on repetitive bending, running, coughing, or sneezing. Although there are a wide variety of treatments for back pain, including medications, exercise, education, self-care, injections, life-style aids, manual therapies, complementary and alternative medicine (CAM) therapies, minimally invasive treatments and surgery, there is surprisingly little consistent evidence to support most of these treatments . Yoga is an ancient discipline designed to bring balance and health to the physical, mental, emotional, and spiritual dimensions of the individual. Yoga is often depicted metaphorically as a tree and comprises eight aspects, or "limbs:" yama (universal ethics), niyama (individual ethics), asana (physical postures), pranayama (breath control), pratyahara (control of the senses), dharana (concentration), dyana (meditation), and samadhi (bliss).

Yoga is now emerging as a recognized means for effectively treating chronic back pain. Studies have shown reduction in pain and functional disability in subjects with chronic low

back pain who undergo a yoga intervention. One of the first steps in practicing yoga is to correct postural alignment, which should help to reduce the pain. Yoga can selectively stretch shortened, tight muscles and strengthen weak, elongated muscles. The most obvious benefit of exercise is its ability to improve or maintain musculoskeletal and cardiovascular function; exercise may be useful for improving back function for patients with low back pain. Rehabilitation programs are typically designed around the goals of strengthening the back, increasing back flexibility and improving cardiovascular fitness. This focus resulted from research demonstrating that impairments of trunk strength, flexibility and endurance are present in many people with chronic low back pain. These impairments result in part from long-term inhibition of movements and physical inactivity those results in neurological and physiological changes in the spine. These changes include weakness of the paraspinal musculature, with selective loss of Type 2 muscle fibres, alteration of the relaxation response of the paraspinal musculature associated with full spinal flexibility and shortening of muscles and connective tissues of the spinal region.

Objectives of the Study

- To find out the effectiveness of yoga in the management of mechanical low back pain
- To find out effectiveness of exercise therapy in the management of mechanical low back pain.
- To compare the effectiveness of yoga versus exercise therapy in the management of mechanical low back pain.

MATERIALS AND METHODS

The data reported here is a part of research project in which 60 subjects underwent yoga and exercise therapy.

Inclusion Criteria:

Patients diagnosed with back pain of mechanical origin and which existed more than 12 weeks.

- Age between 18 to 45 years
- Both male and female
- Consent to participate

Exclusion Criteria

- Inter vertebral disc prolapse

- Spondylolisthesis
- Any surgical history within last 6 months
- Spinal deformity
- Rheumatic diseases
- Hip osteoarthritis
- Renal disease
- Abdominal aortic aneurysms
- Peripheral vascular diseases
- Communication constraint

Procedure:

60 subjects were recruited for the study. Subjects were divided into two groups by using convenient sampling technique after fulfilling the inclusion criteria and subjects were blinded. Each group was containing of 30 subjects. Group 1 received yoga and Group 2 received exercises therapy. In yoga group yogic counseling, yogic stretching and therapeutic aspect of yogic elements i.e. Asanas, Pranayama, and relaxation techniques was employed to give therapeutic intervention. 5 minutes for yogic counseling, yogic stretching and 5 repetitions were made for each asana for 5 minutes and total 50 minutes intervention was given. For exercise group educational talk, auto stretching, strengthening and stretching exercises were given that emphasized on leg, hip, abdominal, and back muscles stretching, 10 repetitions were made for each exercise for 5 minutes and total 50 minutes intervention was given.

Group 1 (Yoga Group)

- Yogic counseling
- Yogic stretching
- Ekpada\dwipadauttasana
- Pawanamuktasana
- Paschimottanasana
- Ardhakatichakrasana
- Bhujangasana
- Padahastanasana
- Instant relaxation techniques

- Shavasana

GROUP: 2 (EXERCISE THERAPY GROUP)

- Educational talk
- Auto stretching
- Straight Leg Raise(bilateral/unilateral)
- Side leg raise(both side)
- Supine cycling
- Prone lying spinal extension
- Prone contra lateral limb raise
- Prone quadruped
- Bilateral limb raise
- Supine rest

It was two weeks intervention and followed by six weeks home practice period. This was observed by random visits to subjects. Practice diary and telephonic monitoring was also done in home practice period.

Outcome Measures: Roland Morris Disability Questionnaire (RMDQ)

The degree of functional impairment was assessed by means of Roland Morris Disability Questionnaire (RMDQ) which is having clinically acceptable reliability, validity and responsiveness. The RMDQ is a 24-item self-report condition-specific functional status assessment that measures patient disability caused by LBP. RMDQ is a 24-item self-report condition-specific functional status assessment that measures patient disability caused by LBP. The questions in the test are taken from the Sickness Impact Profile (SIP), which is a generic test to measure health status. The developers of the RMDQ added the phrase "because of my back or back pain," to the original SIP questions in order to generate a questionnaire which includes disability information on mobility, sleep, mood, recreation, assistance needed, appetite, and other daily activities that may be effected by LBP. This tool is reliable, test-retest ICC = 0.53 and valid.

Sit and Reach Test:

Back pain related flexibility was assessed by using Sit and reach test. The test was administered using a Sit and Reach Box. This test involves sitting on the floor with legs out straight ahead. Feet (shoes off) are placed with the soles flat against the box, shoulder-width

apart. Both knees are held flat against the floor by the tester, if required. With hands on top of each other and palms facing down, the subject reaches forward along the measuring line as far as possible. After three practice reaches, the fourth reach is held for at least two seconds while the distance is recorded in centimetres (cm). It was made sure there were no jerky movements and that the fingertips remained level and the legs were flat. This tool is reliable test-retest $r = 0.65$. Data was collected on baseline, 4th week and 8th week for both the groups for disability and flexibility. The scores were obtained and statistically compared.

RESULTS

Statistical analysis was done by using SPSS version 21.00. Inter and intra group differences were analyzed using the Repeated Measures of ANOVA for each group and each outcome. The mean age for both groups (yoga group and exercise therapy group) was 24.7833 ± 5.03241 years; height was $5.3792 \pm .33533$ and weight 59.5667 ± 12.28664 kilograms. The results show the yoga group had initial mean values for RMDQ 17.7667 ± 2.28463 which was reduced to 12.7000 ± 2.40903 after 4 weeks, and it was 6.3667 ± 2.14127 after 8 weeks and initial mean values for SandR was 8.1000 ± 2.61758 which had improved to 11.8333 ± 2.22963 after 4 weeks and it was 17.4000 ± 2.37225 after 8 weeks. The results for the group 2, which is exercise group, had initial mean values for RMDQ was 17.5333 ± 2.30042 which had reduced to 14.3667 ± 2.35597 after 4 weeks and it was 10.6667 ± 1.82574 after 8 weeks and initial mean values for SandR was 8.1667 ± 2.58755 which had improved to 11.2667 ± 2.43443 after 4 weeks and it was 14.1333 ± 2.33021 after 8 weeks. Mauchly's test of sphericity shows p-values .007 for RMDQ and .000 for SandR that shows significant reduction in disability and improvement in flexibility. Mauchly's test of sphericity is significant for RMDQ and SandR. Sphericity assumed value for RMDQ is .000 which is highly significant and for SandR sphericity assumed value is .000 which is also highly significant. Thus both RMDQ and S and R are highly significant within groups. Between groups RMDQ is statistically significant p value is < 0.05 and S and R is also statistically significant p value is < 0.05 .

DISCUSSION:

Most treatments for chronic low back pain have modest efficacy at best. Exercise is one of the few proven treatments for chronic low back pain. Yoga is a popular alternative form of "mind-body" therapy. Yoga may benefit patients with back pain simply because it involves exercise or because of its effects on mental focus. We found no published studies in western

biomedical literature that evaluated yoga for chronic low back pain; therefore, we designed a clinical trial to evaluate its effectiveness and safety for this condition. This study was designed to compare the effectiveness of yoga and exercise therapy for the management of mechanical low back pain. The purpose of study was to find out which of these programs will be more beneficial in reducing disability and improving flexibility for the management of mechanical low back pain. The study consisted of 60 subjects who were assigned into two groups. Group 1 consisting of 30 subjects received yoga and group 2 comprising of 30 subjects received exercise therapy. Both the groups were assessed to determine the extent of the reduction in the level of disability and improvement in flexibility by using RMDQ and sit and reach test for low back respectively.both within and between groups. There for we can say thatyoga and exercise therapy both are effective for the management of mechanical low back pain.Yoga and conventional stretching were equally effective in improving function and reducing symptoms from chronic low back pain, with benefits lasting at

least several months.Comparing only mean values for both the groups the group 1, which is yoga group, had initial mean values for RMDQ was 17.7667 ± 2.28463 had reduced to 6.3667 ± 2.14127 after 8 weeks and The results for the group 2, which is exercise therapy group, had initial mean values 17.5333 ± 2.30042 for RMDQ of had reduced to 10.6667 ± 1.82574 after 8 weeks. Initial mean values for group 1, which is yoga group, had initial mean values for SandR 8.1000 ± 2.61758 had improved to 17.4000 ± 2.37225 after 8 weeks and for group 2, which is exercise group, initial mean values for SandR was 10.6667 ± 1.82574 had improved to 14.1333 ± 2.33021 after 8 weeks.

These findings goes along with the previous results of the which concluded that Seven (7) days of a residential intensive yoga-based lifestyle program reduced pain-related disability and improved spinal flexibility in patients with CLBP better than a physical exercise regimen. There has been little research on the mechanisms by which yoga practice might relieve back pain. Although westerners often think of yoga as a form of exercise, the practice of yoga places as much emphasis on mental focus as on physical movement and considers the breath, which links the mind and the body, as the key to achieving both physical and psychological benefits. Yoga may be beneficial for back pain because it involves physical movement, but it may also exert benefits through its effects on mental focus.

Yoga increases flexibility and strength, tones muscles, and releases muscle tension, and several studies of patients with low back pain found that yoga increased hip flexion and spinal and hamstring flexibility. However, the mental focus induced by yoga could also help people to increase their awareness of how they had been moving and positioning their body in maladaptive ways, to relax tense muscles, and to relieve mental stress, as, was anecdotally reported by our yoga participants. This study has shown reduction in functional disability and improvement in flexibility in subjects with mechanical low back pain who undergo an exercise therapy intervention. Exercises can selectively stretch shortened, tight muscles and strengthen weak, elongated muscles. Building up strength in muscles and improving flexibility.

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MEAL PLANNING FOR DIABETES MELLITUS

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Abstract

Diabetes Mellitus is becoming an epidemic in India. In Ayurveda it is described as Madhumeha. It provokes greater thought on diet. Well controlled Diabetes Mellitus reduces the risk of Diabetes Mellitus related complications. To design a diabetic meal plan should be prepared taking into consideration the glycemic index of the given food. Though pathaya-ahara described in Ayurvedic text contains less amount of carbohydrates but there are some food items which are medium or high in glycemic Index. Hence, one should use them sparingly.

Keyword: *diabetes mellitus, carbohydrates counting, prameha, glycemic index.*



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Introduction:

Diabetes mellitus is fast gaining the status of a potential epidemic in India with more than 69 million individuals currently diagnosed with the disease. Out of these 8-10 % patients are of Type 1 Diabetes Mellitus and the incidence is rising by 3% per year. In Ayurvedic text, Diabetes mellitus is described as one of the 20 types of *prameha* along with its *Hetu*, *Prakara*, *Chikitsa* and *Pathyapathya*. The knowledge of human nutrition no longer entails merely on prevention of deficiency diseases. Nutrition now plays a major role in the prevention and management of many diseases and there is no disease that provokes greater thought on diet than diabetes mellitus.

Though the concept of disease-wise *pathyapathya* is described in detail in Ayurvedic text, knowledge of carbohydrates counting, glycemic index of food items is necessary for Ayurvedic Physicians also.

Diabetes Mellitus is a metabolic disease characterised by the presence of chronic Hyperglycemia either Immune-mediated (type 1), insulin resistance, gestational or others. Type 1 diabetes mellitus occurs when the pancreas cannot produce insulin which is needed to control blood sugar level. Type 2 Diabetes Mellitus, which is much more common, occurs when the body cannot utilise the insulin.

In patients, diagnosed with diabetes mellitus, the therapeutic focus is on preventing complications caused by Hyper-glycemia. Well controlled Diabetes Mellitus reduces the risk of Diabetes Mellitus related complications. However, constantly elevated Blood Glucose Levels can lead to diabetic retinopathy, Nephropathy, Neuropathy and cardio-vascular diseases.

People with Type 1 Diabetes Mellitus have to have daily insulin injections and type 2 Diabetes Mellitus patients requires oral hypo-glycemic agents to manage their condition along with their diabetic meal plan.

A diabetic meal plan contains 50-60% of daily calories for carbohydrates, 15% from Proteins and the remaining from fats. Complex carbohydrates are better instead of simple carbohydrates.

Total amount of carbohydrates in that particular meal is used to decide the dose of insulin as 1 unit of insulin is required for each 15gm of carbohydrate intake.

Previously most meal plans designed to improve Blood Sugar Level, analysed the total amount of carbohydrates in the food. But Glycemic Index goes beyond this approach looking at the impact of food on actual blood sugar level. The Glycemic Index (GI) is a ranking of carbohydrates on a scale from 0 to 100 according to the extent to which they raise blood sugar levels after eating.

Lower GI diet is associated with decreased risk of cardiovascular disease. Stroke, depression, chronic renal diseases, etc. GI of any given food item is calculated considering the GI of white bread as 100. It is divided as low, medium, High.

Low GI – means GI between 0-55

Medium -GI between 56-69

High -GI 70 or more.

In Ayurvedic texts, Diabetes Mellitus is described as *madhumeha*, one of the twenty types of *prameha*. Also, it is further divided into two types i.e. *Sahaj* (*Beejdoshtpanna*) and *Ahita-Aharsevanjanya*. The *sahaj* type is said to be *Asadhya*, but *Sushrutacharya* has described certain remedies to convert *AsadhyaPrameha* into *Yapya*.

Along with the *Aushadikalpa*, *kriya*, and *Aptarpanadichikitsa*, *Pathyapathya* is also described in detail as follows:

PathyaAhar-Vishkir, Pradutmansarasa, Jangalmansarasa, Yavodan, Yavsattu, Yav-Apupa, Mudga-yusha, Tiktashak, Puranshali, Trina-dhanya, Godhum, Kulath, Danti, Ingudi, Atsi or Sarshaptaila, AmalatiTriphalarasa, Sarodak, Kushodak, Madhudak.

ApathhyaAhar – Nav-anna, Dadhi, Taila, Kshar, Ghrita, Guda, Amlarasa, Ikshuvikara, Pishatanna, Shukt, Asava, Ksheera, Gramya, Audak, Anupmansa.

PathyaVihara :Vyayam, Pragadh-udartan, Avgahasweda, Parishek.

ApathyaVihara – Sada Asana, Diva nidra.

Discussion:

Diet planning plays a major role in treatment of type 1 Diabetes Mellitus and type 2 Diabetes Mellitus. We can get very good results in type 2 Diabetes Mellitus with Ayurvedic regimes. But in type 1 Diabetes Mellitus, we need to focus not only on carbohydrates counting, but also on glycemic index of the food.

While treating Diabetes Mellitus in adults we can easily advice the diabetic meal plan with fixed amount of calories. But type 1 Diabetes Mellitus patients (mostly adolescent and children). We can not fix the required calorie intake as it varies with age and stage of life (puberty, adolescence, etc). Hence, the meal plan must have to be flexible. Due to flexible meal plan insulin dose cannot be fixed rather it have to be calculated as per carbohydrate intake of the particular meal.

In *pathya-ahara* mentioned in Ayurvedic text almost all the food items have low carbohydrate content. But they differ in their glycemic index. For example, *Yav, mudga, kulitha* are low in glycemic index. *Godhum* is having medium glycemic index while *Nachani* is high in glycemic index. So, it should be used sparingly.

Conclusion:

To achieve better results in treatment of Diabetes Mellitus one must have the knowledge of glycemic index along with carbohydrate content of the food. Meal plan should be prepared considering the glycemic index rather than carbohydrate content only.

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CONCEPTUAL STUDY OF UTERINE FIBROID AND ITS AYURVEDIC ASPECTS**Dr. Harshali Kate¹, Vd. Kalpana B. Ayare² & Dr. Manda Ghorpade³**

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Abstract

Uterine fibroids are a major cause of morbidity in women of a reproductive age and sometimes even after menopause. Uterine fibroids are affecting about 20% of female population over the age of 35. The most likely presentation of fibroids is by their effect on the woman's menstrual cycle or pelvic pressure symptoms. Uterine fibroid is an entity that should be suspected in postmenopausal women with fibroid growth. Ayurvedic practitioners must make an attempt to understand the diseases and explore treatment option using basic principle of Nidan and Chikitsa. The management of uterine fibroids can be approached medically, surgically and even by minimal access techniques. The main goal of Ayurved management is Samprapti Vighatana of Granthi.

Keywords: Uterine fibroids, Granthi, Samprapti Vighatana



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INTRODUCTION

Nowadays there is a steady rise in gynaecological disorders. Among these Uterine fibroids are most commonly seen. According to WHO 2% of miscarriage was associated with fibroids and 1.8% of the infertilities are due to fibroids. Uterine fibroids also known as leiomyomas or myomas are the commonest benign uterine tumors, in women during their reproductive years. They are monoclonal tumors of the uterine smooth muscle cells and consist of large amounts of extracellular matrix that contain collagen, fibronectin, and proteoglycan. These tumors are highly sensitive to Oestrogen. They develop following the onset of menstruation, enlarge during pregnancy and regress after menopause when Oestrogen levels are decreased by half. In Ayurvedic classic the entity *Granthi* developing in any part of body. Simulates the description of tumor. The disease *granthi* can be equated all types of small, glandular or nodular swellings developing due to benign tumor. Acharya Sushruta has described the diseases of similar observations and symptom

like *Granthi, Arbuda, Gulma etc. Ayurvedic Samhitas* have described Mamsaja Granthi which perfectly correlates with benign neoplasm in modern medical science.

CAUSES OF UTERINE FIBROID-It is unclear why fibroids develop, but several factors may influence their formation.

-Changes in Oestrogen and Progesterone level.

-Late pregnancy and Multiple pregnancies.

-Lifestyle related causes-stress, diet

-Hereditary

-Genetics

PATHOPHYSIOLOGY-

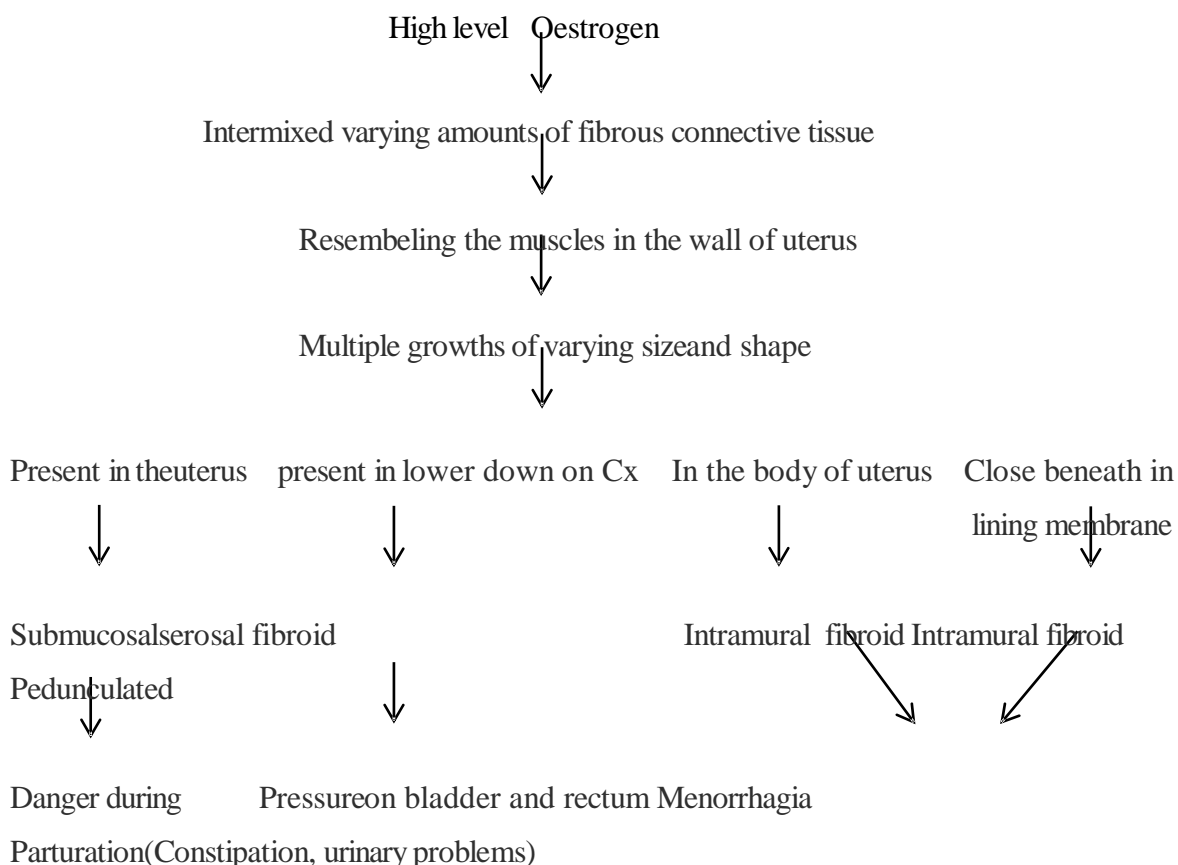
The aetiology of uterine fibroid remains unclear. But the most likely it arises from Neoplastic single smooth muscle cell of myometrium. But the responsible factors for uterine fibroids are

1) Chromosomal abnormality particularly in 6th or 7th chromosomes.

2) Role of polypeptide growth factors i.e. EGF (epidermal growth factor), insulin-like growth factors, TGF (transforming growth factors) stimulates the growth of fibroid directly or via oestrogen.

3) Positive family history

UTERINE FIBROID



TYPES OF UTERINE FIBROID- Uterine Fibroids are classified by their location , which effects the symptoms they may cause and how they can be treated.

1) Subserosal Fibroids-

These develop outside of the uterine cavity and in serosal covering of the uterus and expand outward through the wall, giving the uterus a knobby appearance. They typically do not affect a woman's menstrual flow, but can cause pelvic pain, back pain and generalized pressure. The subserosal fibroid can develop a stalk or stem-like base, making it difficult to distinguish from an ovarian mass.

2) Intramural Fibroids-

Intramural fibroids are the most common type of fibroid. These types appear within the lining of the uterus (endometrium). Intramural fibroids may grow larger and actually stretch the womb. These develop within the lining of the uterus and expand inward, increasing the size of the uterus, and making it feel larger than normal. Many intramural fibroids do not cause problems unless they become quite large.

3) Submucosal Fibroids

They are located inside the cavity of the uterus. These are just under the lining of the uterus. These are the least common fibroids, but they tend to cause the most problems. Even a very small submucosal fibroid can cause heavy bleeding and prolonged periods. Submucous fibroids will often cause bleeding between periods and often cause severe cramping.

SYMPTOMS OF UTERINE FIBROID -

- Heavy, prolonged menstrual periods and unusual monthly bleeding, sometimes with clots; this can lead to anaemia.
- Pain in the back and legs.
- Pain during sexual intercourse.
- Bladder pressure leading to a frequent urge to urinate.
- Pressure on the bowel, leading to constipation and bloating.
- Swelling observed in lower abdomen

Differential Diagnosis-

CONDITION	DIFFERENTIATING SIGN DIFFERENTIATING / SYMPTOMS	INVESTIGATION
ENDOMETRIAL POLYP	There is no differentiating sign and symptoms	-Sonohysterography -T2-weighted MR
ENDOMETRIAL HYPERPLASIA ENDOMETRIAL CARCINOMA	There is no differentiating sign and symptoms Because of High prevalence of uterine fibroid in general female population a substantial number of patients with endometrial carcinoma will present with abnormal vaginal bleeding or discharge.	Endometrial biopsy and D & C provides differentiation. Endometrial sampling an abnormal endometrial biopsy would show either precursor histology for endometrial carcinoma.
Pregnancy	-Symptoms of pregnancy and missed menstrual periods are associated with abdominal expansion over a few weeks. -On examination, uterine enlargement due to pregnancy usually present as soft, regular, globular.	-Pelvic USG visualises the pregnancy sac. -Urine or blood beta-HCG pregnancy test is positive.

POSSIBLE COMPLICATIONS

- Severe pain or very heavy bleeding that needs emergency surgery.
- Twisting of the fibroid, needs surgery .
- Anemia due to heavy bleeding.
- Urinary tract infections, If the fibroid presses on the bladder, it can be hard to empty bladder completely.
- Infertility, in rare cases.

If the fibroid blocks the birth canal or puts the baby in a dangerous position and needs caesarean delivery.

AYURVEDIC ASPECT OF GRANTHI IN RELATION TO UTERINE FIBROID

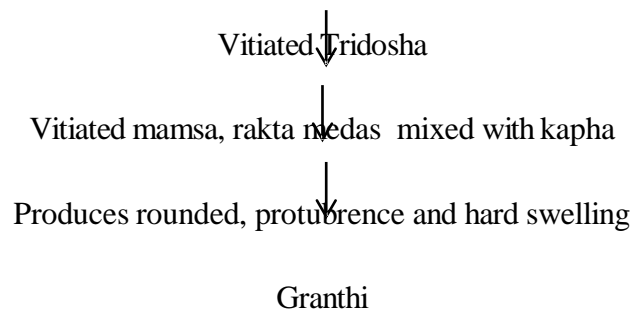
Ayurveda is an ancient Indian system of medicine that deals with various types of diseases and makes use of herbs existing in nature and formulates herbal remedies using the inherent power present in these herbs. In Amarkosha, root word "Granthi Kautilye" has been mentioned which means tortuousness. From this another word "Granthita" is derived which means tying or stringing. According to Acharya Charaka, the clinical features of Granthi are different and they are described in *Shotha Adhyaya*. Acharya Sushruta says that main clinical features of Granthi, Vidradhi and Alaji are swellings or protuberances. According to Vagbhata, Uterine fibroids are growths in mamsadhatu of uterus (growth in muscular tissue of uterus). It is a kapha dominant disorder, other two doshas such as pitta and vata are also involved but to a lesser degree. Localized nodular swelling/growth has been referred under the name of *Granthi*. It is hard and tough, glandular or nodular swelling in appearance. *Granthi* when present in yoni (female reproductive system) / *Garbhashaya* (uterus) will lead to disturbed menstrual cycle - menorrhagia, metrorrhagia, dysmenorrhea, etc., along with infertility. Such clinical entity is diagnosed today as Uterine fibroid. According to Dalhana, *Vata Dosha* (Apan vayu) is the predominant pathological factor for development of Granthi. In Ayurvedic literature total, nine types of *Granthi* have been mentioned depending upon the pathological factor, and the body tissue involved. Fibroids can be related to the "*Granth*" mentioned in Ayurvedic texts, and it can be managed according to the principle of *Samprapti Vighatana* (to break the pathogenesis).

PATHOGENESIS (SAMPRAPTI) OF GRANTHI

Pathogenesis of *Granthi* is propounded as when morbid *Tridoshas*, vitiate *Rakta* (blood), *Mamsa* (fleshy/muscles), and *Meda* (fat / adipose tissue) that are admixed with *Kapha* produce rounded protuberant, knotty or glandular and hard swelling called *Granthi*.

Etiopathogenesis, clinical features and treatment of *Granthi*, are identical to the *Granthi* of any other body part, however few clinical features present due to a specific location of the disease as a result of anatomical and physiological disturbance. *Granthi* when present in *yoni* (female reproductive system)/*Garbhashaya* (uterus) will lead to disturbed menstrual cycle-menorrhagia, metrorrhagia, dysmenorrhea, etc., along with infertility.

Samprapti of Granthi



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ROLE OF YOGA AND AYURVEDA IN STRESS DISORDER

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Abstract

Stress is what you feel when you react to pressure. Pressure can come from things like work, family, money, illness, or from an internal need such as wanting to achieve a goal, wanting to fit in, or the way you feel about yourself. Everyone handles stress differently. Anxiety, migraine, insomnia, mood and behavioral disorders, sleep disorders are very common, this has got increment due to social media addiction so it become a major issue to be think on. As per ayurveda similar disorders are told by many acharyas are unmad, apsmara due to ManovahaStrotoDushti. Ayurveda says if aatma man and indriyas are in healthy condition then a person called as swathapurusha.(Su.su.15/17) According to ayurveda, these disorders can be treated by Panchakarma , Yoga, Pranayama and various formulations like medhyarasayans and behavioral therapy through natural techniques that enhances mental ability in curing such a disorders. For anxiety, sleeping disorder we can do Panchkarmas such as shirobasti, nasya ,aaschotan karmas and shirobhyanga. In yoga almost all the karmas are helpful to treat these manovah strotasvyadhis i.e. stress disorders form anulomvilom to pranayama, Asanas, dhyandharna. Bhastrika and Bhramari pranayama giving best results in migraine and insomnia. Now a day's Yoga and Panchkarmas are widely used treatment for stress related disorders among the world and given a miracle results. Ayurveda and Yoga is said to be a complete science, as it fulfills the WHO's definition of health by addressing the individual at all physical, psychological, and social levels, i.e. "SamadhatuSamadoshasamagnischmalakriyah"

"PrasannaAatmendriyamanah, SwasthaItiabhidhiyate!!"(Su.su.a15/17) Stress affects individuals of all age groups, and people of all sectors and occupations, including doctors. Though many modalities of treatments are available for reducing stress, people are trying to find an alternative to be relieved from stress without medications. Yogic science, having persisted for 5000 years and known to be spiritual for many years, is now being proven through scientific studies to have significant benefits on health.

Keywords:- *Stress, Yoga, Ayurveda, Pranayama, panchakarma.*



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ARTICLE

The Stress Response

The Stress Response floods your body with chemicals made to prepare you for “fight or flight”. This helps you react quickly under pressure, gets you ready to meet challenges, and it is helpful in true emergencies. The Stress Response is a normal reaction, but it can be harmful if it goes on too long. After the pressure or emergency situation has passed the Stress Response is supposed to turn off so your body can rest. If your body is constantly in “fight of flight” mode it can wear your body down. If this continues for a long time it can have negative affects on your physical health and wellbeing. Signs Your Stress Response is Overworking Change in Feelings Feeling sad, edgy, irritable, anxious, or panicked, much of the time Blaming other people for bad things that happen to you

Symptoms of Depression

Only seeing the down side of situations,

Feeling like things that you used to enjoy aren't fun now.

Physical symptoms-

Dry mouth or skin problems,

Loss of appetite or need to eat

constantly Headaches, stomachaches,

diarrhea or constipation

Trouble in sleeping

How Stress Harms Your Health Stress can contribute to the following conditions:

Anxiety Disorder, Depression, Diabetes, Hair loss, Heart disease, Hyperthyroidism, Sexual Dysfunction, Tooth and gum disease, Ulcers, Weight gain or loss

How to Lower Your Stress Level

1. Don't Over Schedule Yourself

2. Leave room in your life for the things you like to do, for things that make you laugh, and for moments with friends and family.

3. Make a List and Ask for Help

Make a list of all the things that have to get done.

4. Decide which ones are the most important, which are less important and can wait, and which you can get help with. Then work on them one by one.

5. Have Healthy Habits

Exercise, eat well and get enough sleep.

6. Relax

Take time to unwind and calm down everyday. Try going for walks, reading, doing a craft, sitting and enjoying time with friends or family. Follow the guide below to engage your relaxation response.

7. Starting a Relaxation Response Practice

The Relaxation Response is a state of rest that is the opposite of the Stress Response. The Relaxation Response tells your body to stop the fight or flight mode.

Set aside 10 to 20 minutes once or twice each day to practice a Relaxation Method. Try to find a quiet place where you can sit or lie down alone to practice.

Pick one of the following methods to use.

You may need to try a few to see which one you like the best, or you can alternate them. Each can create deep relaxation: Deep Breathing Tense & Relax (Progressive Muscle Relaxation) Guided or Visual Imagery Mindful Meditation The following yoga techniques that can help calm an unsettled mind and aid in anxiety treatment naturally.

A: Do Yoga Asanas and relieve your stress of mind.

These yoga postures can help achieve a happy and healthy mind and body. Asanas help release tension and negativity from the system.

1. Dhanurasana (Bow Pose)
2. Matsyasana (Fish Pose)
3. JanuShirsasana (One-Legged Forward Bend)
4. Setubandhasana (Bridge Pose)
5. Marjariasana (Cat Stretch)
6. Paschimottanasana (Two-Legged Forward Bend)
7. Hastapadasana (Standing Forward Bend)
8. AdhomukhaShwanasana (Downward Facing Dog)
9. Shirshasana (Headstand)
10. Shavasana (Corpse Pose)

Note: At the end of the yoga posture session, lie down in Yoga Nidra to give your mind and body a few minutes of thorough relaxation. The technique is helpful in flushing out body toxins, a primary cause of stress, from the system.

B: Breathe right with pranayamas to relieve anxiety

Taking your attention to the breath can help free the mind of the unnecessary clutter of thoughts that breed anxiety. Try the following breathing practices:

KapalBhati Pranayama (Skull-Shining Breathing Technique)

Bhastrika Pranayama

NadiShodhan Pranayama (Alternate Nostril Breathing) – effective in releasing stress from the system (where the exhalation is longer than the inhalation)

Bhramari Pranayama (Bee Breath)

C: Meditate to enjoy the gift of a relaxed mind

Meditation can be an excellent technique to relax a distracted mind, give you a sense of calm and peace, and also observe with daily practice how your mind works to keep you involved in small, petty things around. It can also help you not worry too much or get anxious of the unknown future.

You might have often heard the term ‘adrenalin rush’. This happens when we get too anxious about a potential threat. For instance, while taking an adventure ride. At such a time, the level of adrenalin hormone goes higher, leading our heart to beat faster, making the muscles tense and our body sweat profusely. Scientific research has shown that regular meditation practice can help significantly reduce the level of this stress hormone.

D: Apply yoga philosophy in your life; stay happy and enjoy every moment

Knowing and applying the ancient yoga knowledge in daily life, which talks about some simple yet profound principles (yamas and niyamas) of yoga, can be the secret to happy and healthy living. For instance, the Santosha principle (niyama) teaches the value of contentment. The Aprigraha principle can help us overcome greediness or the desire to keep possessing more, which can be a reason for stress and anxiety. Also, the Shaucha principle talks about cleanliness of the mind and body. This rule can particularly help if you tend to get too anxious about catching infectious diseases.

The yamas and niyamas of yoga will also help us eat nutritious food and live a healthy lifestyle which greatly helps to overcome anxiety and stress.

Managing stress with Panchkarma therapies

Panchakarma therapies help to expel the toxins and other poisonous substances out of the body , improve the blood circulation in various parts and there by pulling out the negative energy out of the body and mind which causes stress. Following are the commonly used types

1. Shirodhara

This procedure is performed by allowing gently warmed herbal medicinal oil to flow on the forehead of the individual, kept in a vessel hanged right above the head. This is highly relaxing and soothing. During this a gentle massage is also performed which helps the person to relax further and overall effect is calming down of the nervous system and treating nervous disorders.

2. Tailadhara

This is another Panchakarma process which also acts at strengthening the control of a person on his mind and relieving him of the stress causing agents. In this procedure , the entire body is massaged with medicinal oil having a variety of highly beneficial herbs deodar, assida , sesame oil and milk. This facilitates the person to perspire releasing the toxins from the skin.

3. Snehapana

This procedure is the oral administration of mixture of herbs in ghee or butter. The herbs used are asparagus , gooseberry , sandalwood , neem , amlaki etc

- Appliance of Paste of Ayurvedic Herbs (Tagara, Vacha, Rakta-chandan and Nilotapala-these four herbs mixed with luke warm Ghee).Take ayurvedic medicines internally, such as,
- Ashwagandha which is one of the most effective ayurvedic resource
- Vacha (Acoruscalamus),
- Jyotishmati (Celestruspaniculatas),
- Shankhapushpi (Convolvulus pluricaulis),
- Tagara(Valerianajatamansi),
- Jatamansi (Nardostachysjatamansi),
- Brahmi (Centellaasiatica),
- Haritaki(Terminaliachebula) etc.

- In addition, relaxation techniques, such as deep breathing and biofeedback, may help to control the muscle tension that often accompanies anxiety

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MENSTRUAL DISORDERS ESPECIALLY PCOS AND INTEGRATED APPROACH OF YOGA THERAPY

Dr. Manisha V. Moghe

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Abstract

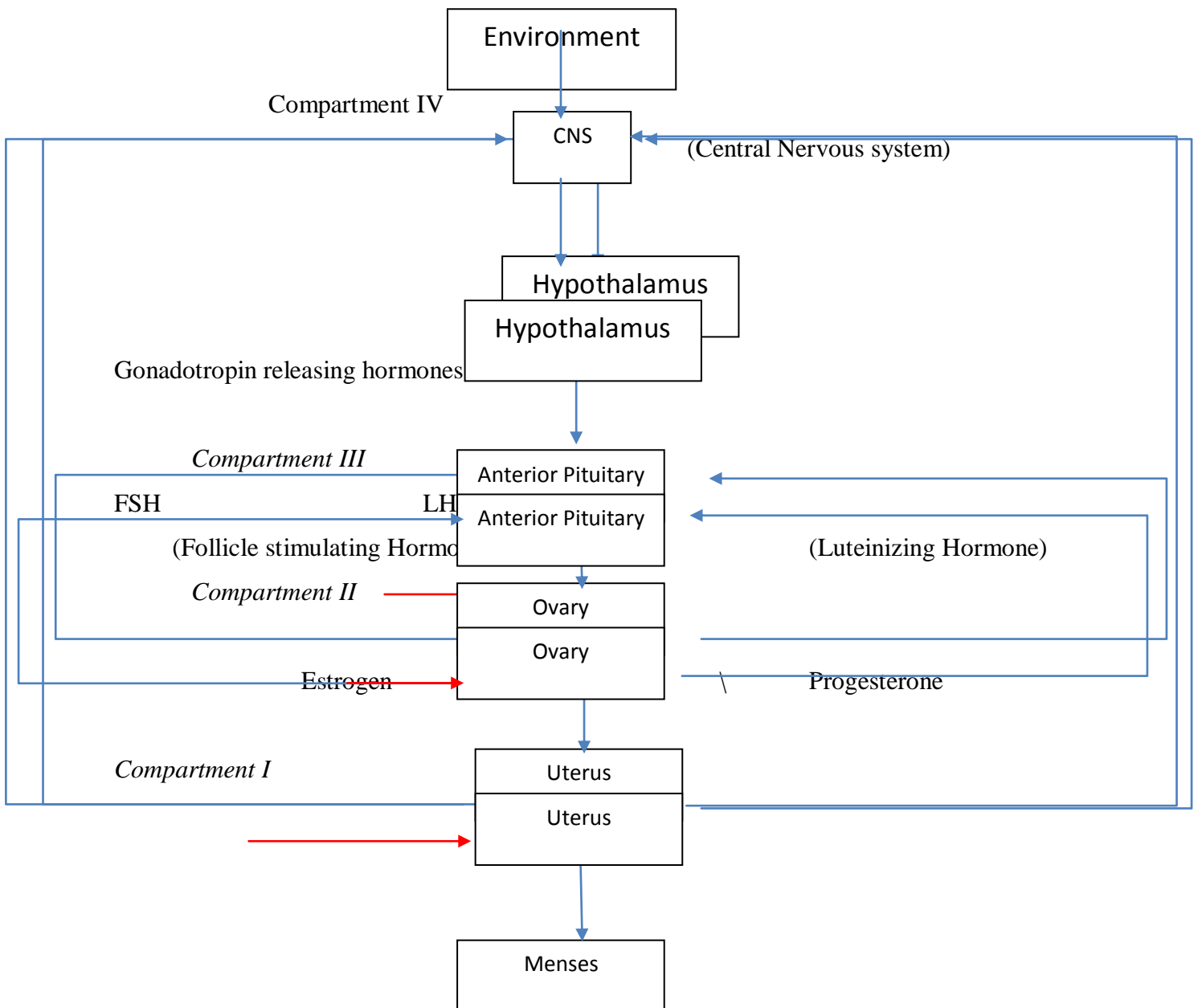
Menstrual disorder is now a days increasing problem(especially PCOS is most prevalent in puberty and child bearing age). Modern life style, faulty diet, obesity, lack of exercise & too much stress is the reason behind this. These all reasons create hormonal imbalance in body which manifest as menstrual disorder. Integrated approach of yoga therapy based on Spiritual-Emotional-Mental-Hypothalamus - Pituitary-Ovarian axis can be definitely implemented to treat these disorders.

Keywords: *Menstrual disorder, yogic concept of body, integrated approach of Yoga therapy*

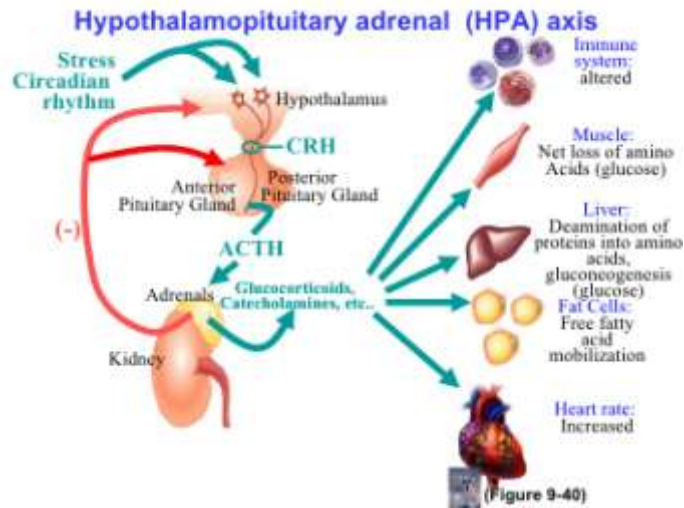
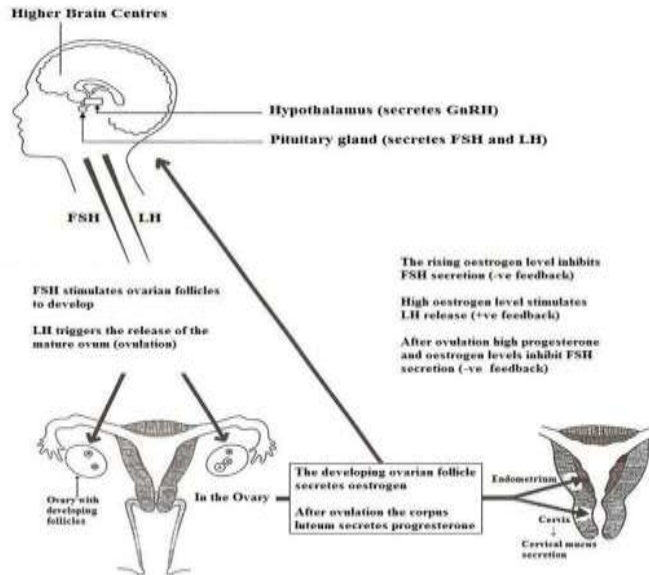


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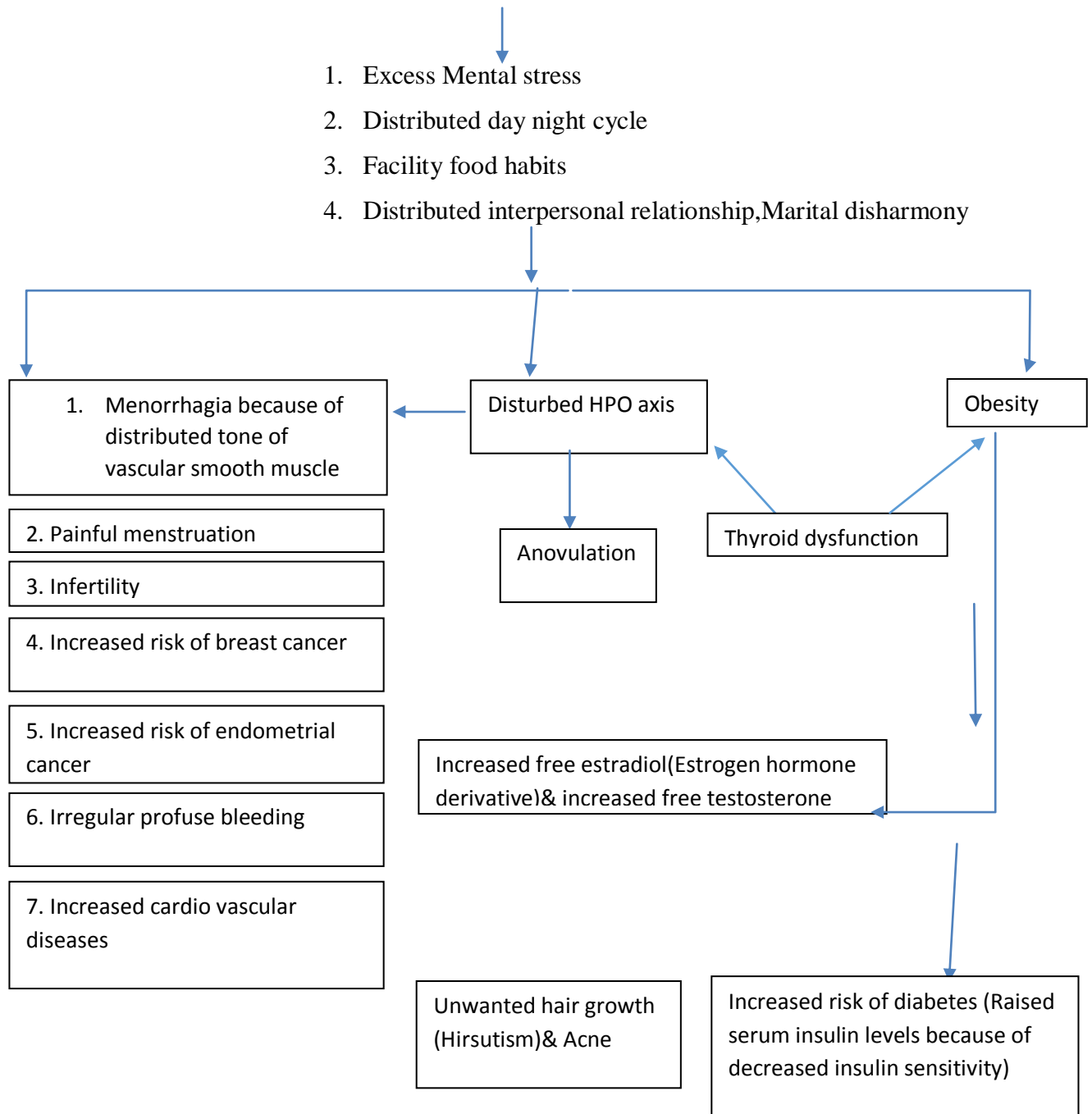
Now a days, it is observed that most of the ladies complain about menstrual disorders. Most of girls between age 14 to 25 years are having problem of irregular menstrual cycles – in some cases cycle also extended up to 3 to 4 months. The reason behind this is Modern Life Style. To understand let us have a glance at Biological changes in body during Menstruation.

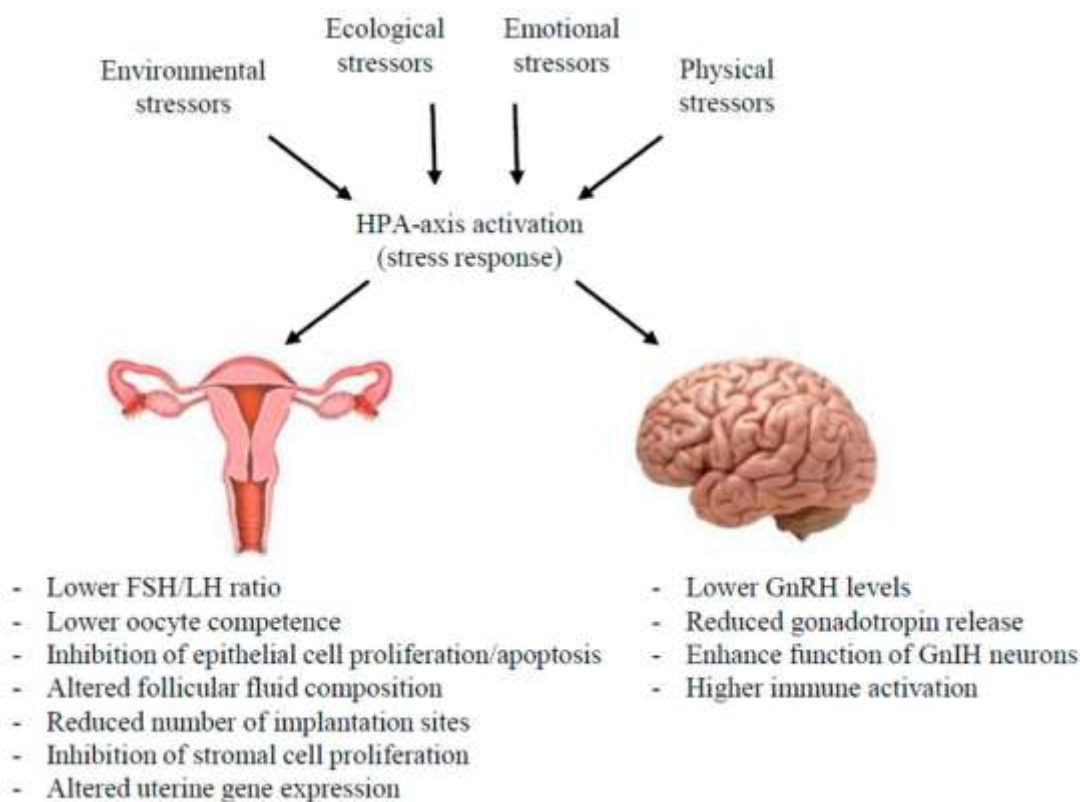


**Regulation of Hormones
(Feedback Mechanism)**



Modern Life Style





Very high speed of life, faulty life style, irregular timings of work, faulty diet, obesity, lack of exercise too much mental stress of exams and career disturb **hypothalamus pituitary ovarian (H.P.O.) axis**. This results in defective process of ovulation leading to PCOS. It is nothing but collection of a lot of immature follicles on the surface of ovary. Lack of ovulation results in accumulation of unnecessary hormones in body.

Stress activates release of Corticotrophin-releasing Hormone (CRH) from hypothalamus. CRH activates sympathetic nervous system & also regulates ACTH secretion.

Probably excessive stress stimulates production of cortisol as well as endorphins. This reduces the release of gonadotropins necessary for the process of ovulation. It suppresses secretions of FSH & LH. This could probably play a role in genesis of an ovulatory cycles.

A lot of hormones responsible for maintaining cyclist of menstrual rhythm are disturbed because of stress. They include hormones from thyroid gland, adrenal gland & pituitary gland including FSH, LH and Prolactin.

The role of pineal gland is to maintain circadian rhythm, contributing to the normal menstrual cycle rhythm cannot be neglected. Pineal gland serves as an interface between the

environment & hypothalamic pituitary function. Pineal activity can be viewed as the net balance between hormone & neuron mediated influences.

It is no doubt a heterogeneous disorder of varied etiology. Research over last so many years has not yet resulted in exact nature or pathophysiology of this disorder. Concepts & thoughts keep changing & newer hypotheses arise again and again.

Yogic concept of body:

Before starting yoga therapy we have to understand basic concept of Yoga about our body.

PanchaKosa : Five layered existence of Human being

1. AnnamayaKosa : expression in consciousness in physical body
2. Pranamayakosa : expression in pranik energy network.
3. ManomayaKosa : expression in mind.
4. Vijanmayakosa : expression through knowledge of self
5. AnandmayaKosa : expression of real happiness

Just every nation has its own Personality. India has spirituality for its Personality, a wisdom enshrined in the Vedas & Upanishads. That we are not just the physical bodies but have four more subtle bodies and pure consciousness forms the foundation all the five bodies, nay, all creation.

Yoga is not a magic or a rope trick. It is not merely a set of yogasanas or Pranayama or meditation but it is a Science of Holistic living consisting of a Holistic value System featured by health & wealth, bliss and poise, harmony & efficiency.

Integrated Approach of Yoga:

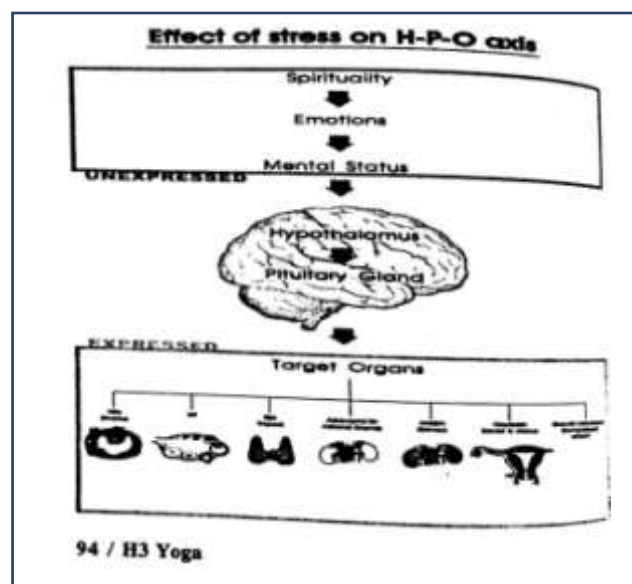
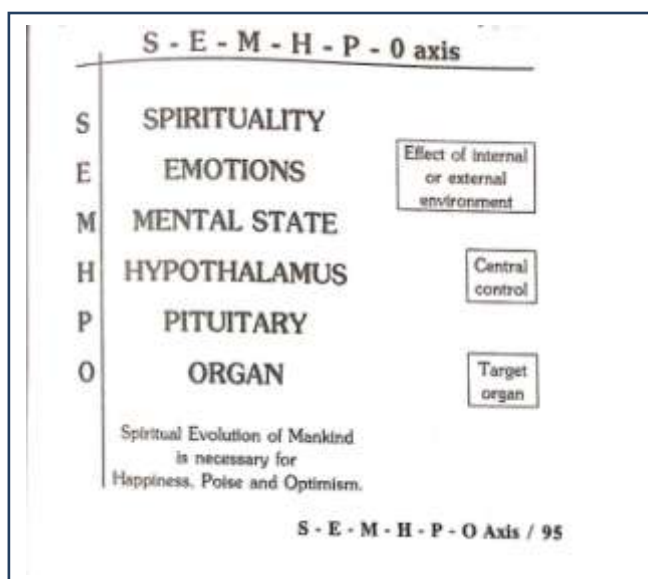
The disturbances in the manomayakosa percolates into the physical layer (AnnamayaKosa) through the pranamayakosa. Hence in the treatment of these psychosomatic ailments it becomes mandatory to work at all these levels of our existence to bring about quickest results. The integrated approach, thus consists is not only dealing with physical sheath, the relief of which could at best be temporary as is happening with the drugs used in modern medicine to treat diseases of the psychosomatic illness like Asthma, Diabetes Mellitus, Hypertension etc., it also includes using techniques to operate on different sheaths of our existence.

The large number of yoga & Upanishads are adopted to balance & harmonize the disturbances at each of the five kosas & tackle this type of complex psychosomatic ailments.

A common Psycho-neuro-endocrine origin can definitely be attributed to rising incidence of menstrual disorders.

An integrated approach of yoga therapy based on **spiritual-emotional-mental-hypothalamus-pituitary ovarian axis(S-E-M-H-P-O axis)** can be definitely implemented to treat these disorders (Figure on page 94)

SEM – HPOaxis stands for spirituality, emotions, mental state, hypothalamus and pituitary target organ axis.



S: Spirituality gives a firm foundation of thinking, If a person develops a spiritual attitude, he tries to go nearer to his own self.

E: Stands for emotions. Emotions act upon the mind and mind acts upon the body.

M: Mind is an ability of expression of thinking memory, emotions & awareness as its different function. According to yogic concept of '*panchkosha*'. It is third layer of existence.

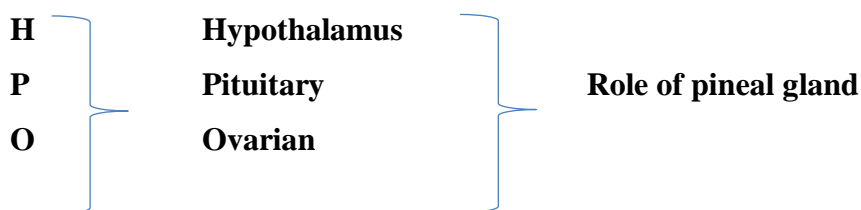
Mind: one of the four inner instruments and which is unseen but very powerful (**अंतःकरणचतुष्टय**) is unstable, wavering, restless, weak, and frightened. Many a times it is in a confused state with resultant loss of discriminating power. Mind easily knows what is good and what is bad, but fails to know what is wrong and what is right. The likes and dislikes predominate in *manomayakosa*.

Though unseen by any means mind is the most powerful system of body controlling almost all other systems.

According to yogic philosophy diseases first originate in 'Manomayakosa' & percolate down to *pranamaya* & *annamayakosa*, manifesting signs & symptoms of disease.

We all know very well that controlling the mind is the most difficult task. Therefore it has to be done by taking help of breathing techniques by slowing down, or prolonging and developing an awareness of breathing.

The journey is from without to within. A control is achieved over body first by 'asanas' followed by control over breath by *pranayama*. Once we are able to slow down the breath, the thoughts also reduce. The excitation reduces; the heart rate slows down, emotionally also one cools down. Quietening of the mind is done by culturing emotions by reading, hobbies, *mantra japa* etc.



Pineal serves as an interface between the environment and hypothalamic – Pituitary function. Pineal activity can be viewed as a net balance between hormone and neuron mediated influences. Pineal gland decreases GnRH release and thus affects secretion of the hormones from gonads.

Yogic practices prove beneficial in menstrual disorders because; they

1. Regularize the hormonal status by correction of neuroendocrine axis.
2. Regular practice of *asanas* helps in shunting the blood from the pelvic viscera resulting in less congestion & relieves pain during menstrual cycle.
3. The location of main endocrine glands in body and the location of *chakras* (चक्र) centers of *pranic* (प्राणिक) energy – according to yoga correspond to each other very well. **This is more than just a coincidence.** Regular yogic practices at physical, mental, emotional & spiritual level help in tuning of *chakras* (चक्र) thus achieve a hormonal balance.

Sr. No.	Chakra	Corresponding endocrine gland or reproductive organ	Nerve plexus
1	Muladhara	Cervix	--
2	Swadhishtan	Ovaries	Sacral
3	Manipura	Adrenal glands	Solar
4	Avahata	Thymus	Cardiac
5	Visudhi	Thyroid gland	Cervical
6	Ajna	Pineal gland	--

4. Regular practice of *asanas* tones up the muscles, spine & reproductive organs. Autonomic nervous system is also tuned up well.

Selected Yogic Practices – Includes *Setubandhasana, sarvangasana, suryanamaskar-Halasanana, shirsasana, Yogamudra. ViparitKarani mudra* etc. *Pranayama, AnulomVilom/Bhramari*. Regular yogic practices at physical, mental, emotional, spiritual levels could be definitely help to regularize the neurohumoral/neuroendocrine axis so that, levels of gonadotropins, estrogen and progesterone can be balanced very well.

Thus **SEM** axis which is otherwise unexpressed is more effective and powerful than **HPO** which is expressed. A latest concept in psychology confirms superiority of spiritual quotient over emotional quotient & intelligence quotient.

Yoga means spiritually evolving, Yoga means emotion culturing, Yoga means mind controlling, Yoga means mind controlling, Yoga means physical reconditioning. Thus SEMHPO axis works collectively to integrate all the levels.

Only a perfect balance of Spiritual, emotional, mental (SEM), Physical (HPO) axis can bring a perfect homeostasis or harmony in body.

In short ;integrated approach of Yoga therapy

Sr.No.	Kosas	Practices
1	Annamaya	Loosening, Asanas, Kriya, Diet
2	Pranayama	Kriya, Breathing exercises, Pranayama
3	Manomaya	Dhyana, Bhakti
4	Vijanmayakosa	Jana, Lecture & yogic counselling
5	Anandmayakosa	Working in blissful awareness

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Clinical Gynaecology, Endocrinology & Infertility : Mr. Lean Speroff.

AN AYURVEDIC APPROACH TO DIABETESE-REVIEW ARTICLE**Dr. Neeta Patil Padsalge¹ & Dr. (Mrs.) Manisha V. Bhalsing²**

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Abstract

Ayurveda is nothing but science of life, which means various lifestyle modalities are explained in ayurveda. Dinacharya (daily regimen), rutucharya (seasonal regimen), sadvrutta (good conduct), and pathyapathyas (dos and don'ts) are described in ayurveda which help to lead a quality life. Diabetes is emerging to be a most widespread lifestyle disorder affecting large number of population across the world and India being the capital for same. According to ayurveda all the polyuric disorders are considered under prameha and madhumeha. Caraka has given exhaustive description of the disease Prameha which ultimately progresses towards Madhumeha or the sweetness of urine in addition to Polyurea. As the number of population suffering from diabetes is majority of middle class, making the recent advanced medicines difficult to be available for all due to affordability issues and lack of awareness that has led many being unaware of the disease they are suffering from, it is important to bring some treatment modalities that are available for all. Considering all the references from the classics and after studying all the original articles, this review article was written to focus light on the ayurvedic way of life as a preventive measure as well as the measure to enhance the quality of life of all diabetics.



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INTRODUCTION-

Global burden of type 2 diabetes is expected to increase to 438 million by 2030 from 285 million people (recorded in 2010).

Similarly in India this increase is estimates to be 58%; from 51 million in 2010 to 87 million in 2030.

Diabetes mellitus commonly referred to as diabetes is a group of metabolic disorder in which there is high blood sugar level over a prolonged period.

Diabetes Mellitus is a syndrome of impaired carbohydrate, fat and protein metabolism caused by either lack of insulin secretion or decreased sensitivity of tissues to insulin.

As a result, blood glucose concentration increases, cell utilization of glucose falls increasingly lower and utilization of fat and protein increases.

A **prediabetes** diagnosis can be alarming. This condition is marked by abnormally **high blood sugar** (glucose) most often due to **insulin resistance**. This is a condition in which the body doesn't use insulin properly. It's often a precursor to **type 2 diabetes**.

Vagbhatta describes prameha as 'prabhut avila mutrata', which is increased flow of urine with turbidity.

According to ancient ayurveda samanya hetu and lakshanas of Prameha can be approximation to diabetes mellitus.

Lack of awareness is the major reason for diabetic morbidities.

Majority of population suffering from diabetes is unaware as diabetes is silent and asymptomatic for long time.

Moreover 50% population suffering from diabetes is of middle class as a result the recent and advanced antidiabetic medicines are available yet not affordable for the population.

Hence these ayurvedic lifestyle modalities with diet regimens if followed will make the facilities available for all at affordable rates moreover may help improve quality of life and prevent diabetes.

RESEARCH METHOD-

1)All the description related to Prameha available in Caraka Samhita and Sushruta samhita is collected and reviewed.

2)Also description related to Prameha available in modern texts, journals, internet, scientific networks & research paper etc. is also collected and reviewed.

Etiology-

Enjoying sedentary habits and the pleasure of sleep excessively, too much use of yoghurt and its preparation, meat juice of domestic, aquatic and swampy animals, milk and its preparation, newly harvested cereals, new/ fresh wines, preparations of jaggery (cane sugar preparations) and all other Kapha-aggravating factors are the causes of the diabetes syndrome.

Pathogenesis (Samprapti)-

Samprapti of Madhumeha is best described by Acharya Vagbhatta. He said Madhumeha can originate in two ways-

1. By the aggravation of Vata caused by Dhatukshaya.
2. By the obstruction of Vata caused by Doshas covering it.

Madhumeha which is caused by Dhatukshaya manifests as thin and asthenic individual due to loss of Oja. All this is Ojakshaya meaning an imbalance in Ojus. In Margavaranjanya Madhumeha the vitiated Kapha and Meda obstruct the passage of Vata. The obstructed Vata is vitiated again and carries Ojus to Basti thus manifests Madhumeha.

As per Ayurveda according to the potency of particular feature of etiology, Dosha (innate pathogenic factors) and Dushyas (substratum of pathology), response occurs in the form of non-manifestation or otherwise of the disorders. When these three factors do not combine together or if combined after a long time or in weakened state, disorder will not be there, or it will manifest lately, or in a mild form or without all the said symptoms. On the contrary, the result will be contrary.

CRITERIA FOR THE DIAGNOSIS OF DM:-

Fasting:-

- Normal- < 110 mg/dl
- Impaired fasting glucose- > 110 and < 126 mg/dl
- Diabetes mellitus- \geq 126 mg/dl

2-hour post load -

- Normal- < 140 mg/dl
- Impaired glucose tolerance- > 140 and < 200 mg/dl
- Diabetes mellitus- > 200 mg/dl with symptoms

Investigation:-

- O.G.T.T. (Oral Glucose Tolerance Test)
- Lipid profile
- Liver Biochemistry
- Glycosylated Haemoglobin (GHb)
- Blood glucose-Random, Fasting, Postprandial

Diabetes can be controlled by giving comprehensive attention to three aspects:

- (1) Ahara (Diet)
- (2) Vihara (Exercise/lifestyle)
- (3) Oushadha (Medicine)

The role of ahara and vihara are equally or even more important than drugs in order to control blood sugar level as well as to prevent complication of this disease.

FOLLOWING ARE THE DIET REGIMENS DESCRIBED BELOW:

(Indicated) Pathya Ahara for diabetes

Cereals -Yava, godhuma, Shyamaka, kodrava.

Pulses -Mainly beans, Greengram, Bengal gram.

Vegetables -Thiktha shakas, Methika(Trigonella foenum-gracum), Nimba (Azadirachta indica), Karavella (Momordicacharantia), Patola (Trichosanthes anguina), Rasona (Garlic), Udmbara (Ficusracemosa).

Fruits -Jambu (Syzygium cumini), Talaphala (Borassus flabellifer), Kharjura (Phoenix sylvestris), Bilwa (Aegle marmelos).

Eating more fiber-rich foods

Fiber offers several benefits. It helps you feel fuller, longer. Fiber adds bulk to your diet, making bowel movements easier to pass.

Eating fiber-rich foods can make you less likely to overeat. They also help you avoid the “crash” that can come from eating a [high-sugar food](#). These types of foods will often give you a big boost of energy, but make you feel tired shortly after.

Drinking plenty of water

[Water](#) is an important part of any healthy diet. Drink enough water each day to keep you from becoming dehydrated.

If you have prediabetes water is a healthier alternative than sugary sodas, juices, and energy drinks. The amount of water you should drink every day depends on your body size, activity level, and the climate you live in.

You can determine if you’re drinking enough water by monitoring the volume of urine when you go. Also make note of the color. Your urine should be pale yellow.

(Contraindicated)Apathya Ahara for diabetes

Alcohols like Sauveera, Sukta, Maireya and Sura, milk, milk products, oil, ghee, sugarcane juice or sugar, jaggery, alkaline, curd, grain cakes (Pishta), sour substances, sweet drinks (Panakas), and meats of domestic, aquatic and swamp animals should be avoided by diabetic individuals.

In the current era, people are fond of flour preparations, sweetened drinks, refrigerated, preserved and reheated food items, due to the busy schedules of society today, wherein they

hardly have time to eat at home. Such food is low in fiber, high in glycemic loads and is associated with increased risk of diabetes.

Adhyashana (over eating) is also proved as a risk factor for DM. These dietary irregularities further contribute to disturb the carbohydrate and lipid metabolism and result in Madhumeha in susceptible individuals.

First and foremost guideline is to avoid the diet and lifestyle related etiological factors involved in type 2 diabetes (Nidanaparivarjana) [7]. (2) Sthula Madhumehi person diet should be Aparthanaguna and heavy for digestion, while Krisha Madhumehi persons diet should be Santarpanaguna and light for digestion. Krisha patients diet should be such that it doesn't increase meda.

NOW WE SHALL LOOK INTO THE VIHARAS INDICATED:

Exercises -Brisk walking, jogging, bicycling,swimming, playing badminton & tennis.

Yoga -Yoga improves all sorts of metabolismin the body. So diabetics should perform different types of yoga. Yoga will definitely help diabetes mellitus. Yoga now-a-dayshas attracted the attention ofWestern people. Common Aasana that canbe very effective in Diabetes are Padmasan,Shalabhasan, Mayurasan, Suryanamaskar, Dhanurasan.

Discussion

By screening and risk-stratifying individuals as prediabetic, we may be able to develop a strategy to prevent prediabetes from progressing to diabetes. Clinical evidence suggests that we should not accept a prediabetic state but should actually try to convert prediabetes to a normal glucose state. Lifestyle and pharmacologic interventions by themselves may not help prevent long-term microvascular or macrovascular complications of prediabetes. Only by achieving a normal glucose state can we prevent complications of prediabetes and diabetes.

Recent evidence presented in the article suggests that prevention of progression of prediabetes to diabetes and conversion of prediabetes to a normal glucose state is possible. By doing so, we may be able to develop interventions that focus on the risk of the patient with prediabetes.

All patients with prediabetes should complete the following goals:

- 1) lifestyle modification training
- 2) 150 minutes per week of physical activity and
- 3) 7% weight loss if BMI exceeds 25 kg/m².

For high-risk individuals with high BMI, pharmacologic and surgical interventions may be considered if these goals are not achieved

CONCLUSION

WHO identified one particular type of Diabetes as 'Malnutrition Related Diabetes Mellitus', which is common in India. Most of these patients are lean and thin young adults between 15 to 35 years age and more often reported in Kerala and Orissa states. This type can be correlated to Krisha Pramehi. It is presumed that diabetes is mainly caused by heavy food which increases Kapha, Medas etc. But Ayurveda also emphasized that excessive starvation and intake of dry substances can also cause another variety of Prameha (diabetes).

Diabetes mellitus is a metabolic disease of multiple aetiology and described as Madhumeha in Ayurveda. Two type of clinical presentation are seen Krisha Pramehi & Sthula Pramehi as type-I & type-II diabetes respectively. Modern therapeutics has many limitation but Ayurvedic principles of management can help the patient to have better blood sugar control and routine life. The time is right to develop a proactive approach to prediabetes. This approach may include the following recommendations for practice:

Exercise and diet go together

Exercise is a part of any healthy lifestyle. It's especially important for those with prediabetes. A lack of physical activity has been linked to increased insulin resistance, according to the [National Institute of Diabetes and Digestive and Kidney Diseases](#) (NIDDK). Exercise causes muscles to use glucose for energy, and makes the cells work more effectively with insulin. The [NIDDK](#) recommends exercising five days a week for at least 30 minutes.

Exercise doesn't have to be strenuous or overly complicated. Walking, dancing, riding a bicycle, taking an exercise class, or finding another activity you enjoy are all examples of physical activity.

Develop a low-cost, easily accessible lifestyle management program that would potentially be available for the hundreds of thousands of patients with prediabetes.

The primary aim of lifestyle interventions is to prevent diabetes and its complications by targeting obesity and physical inactivity. Patients not responding to lifestyle interventions may be considered for pharmacologic interventions or surgery. The goal for prediabetes treatment should be to normalize blood glucose levels. Strategies targeting interventions aimed at the entire population at risk of prediabetes can make health care more affordable, prevent a preventable disease and save lives.

Diet is a major factor for prediabetic control and if followed with exercise may yield better results.

A well balanced but healthy diet chart must be followed. Eating small meals at regular intervals for four to five times a day has proved to be very effective in management of pre diabetes very well.

Heavy meals must be avoided. Artificial sweetners should be avoided.

All this together can bring a individual back to non diabetic state from prediabetic state if followed well and continued for life.

This will help prevent additional expenditures on medicine and labrotary investigations and moreover improve the quality of life. Thus concluding the article by saying that these models of diet and exercise must be made available for all the population in general and emphasis must be made for its use to help reduce the growing number of diabetics in the country.

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41Ayurvedic Interventions for Diabetes Mellitus: A Systematic Review: Summary

ML Hardy, I Coulter, S Venuturupalli, EA Roth, J Favreau, SC Morton, and P Shekelle.

Ayurvedic Interventions for Diabetes Mellitus: A Systematic Review

Diabetes Mellitus: An Ayurvedic View Sipika Swati, Prateek Agarwal

Role of diet and lifestyle in the management of Madhumeha (Diabetes Mellitus)

Gyaneshwarsing Guddoye and Mahesh Vyas¹

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THE EFFICACY OF HOMOEOPATHIC MEDICINES IN MANAGEMENT FOR OSTEOARTHRITIS

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Abstract

The objectives of study were The Efficacy of Homoeopathic Medicines in Management for Osteoarthritis. The Prospective Observational study was carried out with detail case study. I have studied 62 cases in my pilot study. I have reported only 30 cases as required for incorporation in this dissertation. This study was done by collecting the data and treating the 30 patients presenting with symptoms of OA where homoeopathic medicine were prescribed on basis of totality of symptoms of individual patient. Western Ontario and McMaster Universities (WOMAC) OA index and Numerical Rating Scale (NRS) which used for assessment of improvement. Homoeopathic medicines were found to be useful to reduce the intensity of pain and stiffness and improve the quality of patient. Most useful remedies are Calcarea Carb, Calcarea Flur, Bryonia Alba, and Rhus Tox, Sulphur, Thuja, kali carb, medorrhinum, pulsatilla used indicated in most of patients. The maximum used potency was 200. . The study shows that the counselling, regular exercise, dietary management and weight reduction was must for good results in all cases.

Keywords: *Homoeopathic Medicines, Osteoarthritis, WOMAC OA index, Numerical Rating Scale (NRS),*



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Introduction

Osteoarthritis is the second commonest musculoskeletal problem in the world population (30%) after backache (50%). Pain and functional impairment are the key factors plays important role in suffering of people with OA as well as the significant reduction in quality of life is second more important issue. Osteoarthritis of knee is a common clinical problem in India.

The patient usually presents with pain, morning stiffness, swelling, restricted movements & inability to a squat in the Indian toilet or on unable to sit on floor in squatting position. The onset is insidious starting with a mild aching pain in the joint, which is relieved by rest. The knees are the body's primary weight-bearing joints are frequently involved in Osteoarthritis. They may be stiff, swollen and painful, making it hard to walk, climb, and get in and out of chairs and bathtubs. Indians are having increased knee OA as compared to western people.

The age related increase is more common in woman. There is a steady rise in prevalence from age 30.

The aim medical management of OA is not only to reduce pain but also to slow or prevent further decline in functional status of the patient. The natural history of OA is usually slow, chronic progression, or of stable periods with intermittent worsening of symptoms. With new or increased pain the activity is reduced naturally. As activity decreases the muscle bulk and strength also start reducing which may lead to decreased joint stability, worsening of joint degeneration, and further decline in functional status of patient. Current treatments for may improve symptoms of the patient but do not delay progression of OA. OA is not a systemic disease but because of related decline in functional status can have major systemic consequences affecting cardiovascular health, emotional health, and sense of well-being. So to break this cycle may require a team approach.

The aim of Homeopathy is not only to treat osteoarthritis but to treat its underlying cause and individual susceptibility. Homoeopathic medicines help in improving ADL (activity of daily living) by reducing pain, stiffness and limiting the disease process. In Homoeopathy several well-proved remedies are available for osteoarthritis which can be selected on the basis of causation, location, sensation, modalities and extension of the complaints. Homoeopathic medicine like Calcarea Carb, Calcarea Flur, silicea, natrum mur etc we can improve the assimilation and defective nutrition and treat the malunion of bone. Along with homoeopathic medicines Exercise forms an integral part in the management of OA.

AIM AND OBJECTIVES

- To evaluate the utility of homoeopathic medicines in cases of OA.
- To avoid the side effects of pharmacotherapy.
- To reduce the recurrence and intensity of joint pains.
- To prevent the dependency of patient due to pain for doing day to day activities.(Quality of life)

METHODS AND MATERIALS

A) STUDY SETTING:-

1)**Theoretical study**:-Theoretical study of Osteoarthritis was studied from Text books of Practice of Medicine, Orthopaedic books , Homoeopathic journals, authentic internet sites

,previous homoeopathic research work and homoeopathic materia medica and homoeopathic repertories

2) Clinical study: The Prospective Observational study was carried out study with detail case study. The homoeopathic prescription was as per the Symptom Similarity and follow up done in Bharati Vidyapeeth Medical Foundation's Homoeopathic Hospital, OPD, and various rural and urban camp series.

3) Case definition: Case presenting with symptoms such as persistent joint pain worse on walking, with use of stairs, squatting position, morning stiffness not more than half an hour, and gelling i.e. Pain after the period of immobilization was considered for clinical diagnosis. The joint pain in OA of age group of above 35 yrs and of both the sexes.

B) STUDY DESIGN:

Minimum 30 cases satisfying the case definition and inclusion and exclusion criteria were studied with the time duration of fifteen months. Follow up of every case was recorded regularly and at the interval of 15 days. In acute exacerbation follow up was recorded at interval of 4 to 8 days interval.

C) INTERVENTION AND SELECTION OF TOOL

1) Sampling procedure – Case presenting with symptoms such as persistent joint pain that worse on walking, with use of stairs, squatting position, morning stiffness not more than half an hour, and gelling i.e. Pain after the period of immobilization was considered for clinical diagnosis. Examination of joint for presence of crepitus, or osteophytes, restricted movements. Joint line tenderness was being carried out. The ACR criteria are used to distinguish OA from other causes of symptom. All Patients was diagnose on the based upon criteria established by ACR. WOMAC OA INDEX questionnaires were used before and after treatment to see improvement of quality of life. Body Mass Index was calculate by measuring individual's weight in Kg and dividing his/her height in meter square to know the relation between incidence of disease and obesity. (Table:1)

2) Selection of remedy:-After the selection of patients according to pre-defined criteria as stated above. A specific case format was be filled by each patient with detailed case history and detailed physical examination was be done for diagnosing the disease clinically, the symptoms carefully evaluate for the arriving at prescribing totality. Repertorisation was being done after selecting the corresponding rubrics. Synthesis, Boricke, Phatks repertory was be

used for selection of remedy. The simlinum was base on totality of symtoms. Medicine was considered on the basis of miasms, predisposing and complaints, precipitating factors, generalities, modalities, presenting complaints, constitutional features or reportorial totality. In some patients prescriptions based were based on characteristic symptoms or keynotes. Each patient was prescribed a single Homoeopathic medicine at a time. Repetition depending upon susceptibility of the patient and nature of prescribed medicine. The improvements of the patients were monitored. If patient was not shown any progress within next 2-3 days then acute acting medicine was prescribed for 2 to 3 days to control the pain intensity. During acute pain condition acute acting medicine was prescribed on basis of acute totality having no inimical relation with previously administered medicine.

3) Selection of potency and Repetition of doses: - All the medicines were prescribed in 30C 200C raising potency 1M, 10M potency and selection was as per the susceptibility of individual patient. Repetitions were done according to the present state of patient as per the principle of homoeopathic posology. The medicine was changed when patient did not shown any improvement in the complaints on two successive follow up in spite of raising the potency , following Gibson Miller Remedy Relationship chart which is given in Boericke Materia Medica. Placebo was continuing as long as improvement continued once Constitutional simlinum prescribed.

4) Administration of the drug: Drug administration was done through oral route in pills and powder form.

5) Drug dispensing: Has been done in globules, powder form.

6) Storage: - Drugs has been acquired from the standard homoeopathic pharmacy and drugs have been stored as per the rules of Homoeopathic pharmacopeia of India (HPI).

7) Declaration: - It has been given that the drug used is not harmful to human beings. Given remedy was already available in homoeopathic literature, well proved on healthy human beings and is harmless, having no side effects.

8) Clinical protocol: - Ethical Committee approval has been taken. Data was collected by proper method and was processed in standard format. Total research project has been submitted to Ethical committee and patients have been selected according to case definition. Patient was explained about the research project.

9) Nosological diagnosis: Diagnosis has been done by ACR criteria, patient's prior investigation and physical examination. Standardized case format was prepared and was maintained of individual patient. Standardized follow up sheet was prepared and maintained regularly.

D) INCLUSION CRITERIA:-

1. All patients fulfilling the case definition. Case presenting with symptoms such as persistent joint pain that worse on walking, with use of stairs, squatting position, morning stiffness not more than half an hour, and gelling i.e. Pain after the period of immobilization
2. Patient of age group above 35yrs of the both sexes.
3. Known cases of arthritis.
4. Patients presenting joint line tenderness, swelling, crepitus, or osteophytes, restricted ROM, deformity (varus, valgus, flexion knee deformity) on clinical examination.

E) EXCLUSION CRITERIA: -

1. Patient not fulfilling the case definition (Case presenting with c/o of joint pain in OA of age group above 35yrs group of both the sex.
2. Patients more than 85 years of age.

F) PROBABLE DEFINITION AND RESOLUTION.

a) Diagnosis- Diagnosis was done by detailed history taking as per the standard case format, physical examination and investigations using ACR, WOMAC INDEX.

1. Patient was identified in correct group.
2. Utilization of data was being done for selection of the patient.
- 3. Treatment was follows** –Homoeopathic treatment, Proper diet and regimen, Auxiliary line of treatment.
4. Quality of life was assessed by WOMAC OA INDEX before and after treatment.

G) CRITERIA OF FOLLOW UP: Standard follow up criteria was done as per the criteria. Regular follow ups of all the patients was maintained .In each follow up detail symptomatic changes were recorded and clinical examination was done and prognosis had been studied. Follow up was taken after 15 days. It has been based on homoeopathic principles. The presence or absence of radiological evidence of loss of space ,osteophyte formation, subchondral bone thickening or cyst formation was not be considered much significant for

assessment. The relations between radiological changes of OA and symptoms are weak and follow up radiograph was not being taken.

H) OUTCOME ASSESSMENT: Improvement is evaluated under 3 headings.(Table:2)

TABLES

Table 1 : Criteria For Assessment Of Obesity

BMI (KG/M2)	CRITERIA FOR ASSESSMENT OF OBESITY
18.5-24.9	NORMAL
25-29.9	PRE OBESE AND OVERWEIGHT
30-34.9	OBESE CLASS 1
35-39.9	OBESE CLASS 2
MORE THAN 40	OBESE CLASS 3

Table 2: Outcome Assesment Table

CRITERIA	SUBJECTIVE / OBJECTIVE SYMPTOMS	% RELIEF
MILD	REDUCTION IN PAIN AND OTHER SYMPTOMS WITH RECURRENCE AFTER LEAST EXERTION.	10-15 %
MODERATE	DISAPPEARANCE OF MORNING STIFFNESS, CRACKLING, LOCK KNEE, LIMITATION OF MOTION ETC. BUT PAIN IS PARTIALLY RELIEVED.	15-20%
MARKED	COMPLETE DISAPPEARANCE OF SUBJECTIVE AND OBJECTIVE SYMPTOMS (EXCLUDING RADIOLOGICAL FINDING)WITH NO REOCCURRENCE DURING PERIOD OF STUDY	20% & ABOVE

Table 3: Total Patients Enrolled

NO OF PATIENTS	TOTAL	MALE	FEMALE
REGISTERED	62	14	48
DROPPED OUT	32	7	25
INCLUDED IN STUDY	30	7	23
		7	23
		(23.3%)	(76.7%)

Table 4: Clinical Types

	CLINICAL TYPES	TOTAL	MALE	FEMALE
PRIMARY	PRIMARY LOCALIZED	25	7	18
	PRIMARY GENERALIZED	5	0	5
SECONDARY	SECONDARY POST TRAUMATIC	2	1	1

SECONDARY	-		
ENDO-HYPOTHYROIDISM	3	0	3
SECONDARY NEUROPATHIC ORTHOPATHY DM	-	5	2
			3

Table 5: Joint Involved

JOINT INVOLVED	TOTAL	MALE	FEMALE
KNEE JOINT	28	6	22
LUMBAR JOINT	17	2	15
CERVICAL JOINT	6	0	6
HIP JOINT	4	2	2
SHOULDER JOINT	4	1	3
ANKLE / FOOT JOINT	3	0	3
ELBOW JOINT	2	0	2
SACRO-ILIAC JOINT	2	0	2
CARPOMETACARPAL JOINT	1	0	1

Table 6 : Improvement Assessment

IMPROVEMENT ASSESSMENT	TOTAL	MALE	FEMALE
MARKED	19	3	16
MODERATE	5	3	2
MILD	6	1	5
DROPPED OUT	32	7	25

Table 7: Student's T-Test Was Applied For Statistical Analysis.

PAIR	PAIRED SAMPLE (WOMAC SCALE)	MEAN (μ)	SD (σ)	SEM
PAIR 1	PAIN BEFORE	8.07	3.20	0.58
	PAIN AFTER	3.90	2.91	0.53
PAIR 2	STIFFNESS BEFORE	2.83	1.79	0.33
	STIFFNESS AFTER	0.93	1.03	0.19
PAIR 3	PHYSICAL FUNCTION BEFORE	26.37	8.88	1.62
	PHYSICAL FUNCTION AFTER	10.63	7.69	1.40
PAIR 4	NRS BEFORE	3.88	1.28	0.23
	NRS AFTER	1.61	1.09	0.20

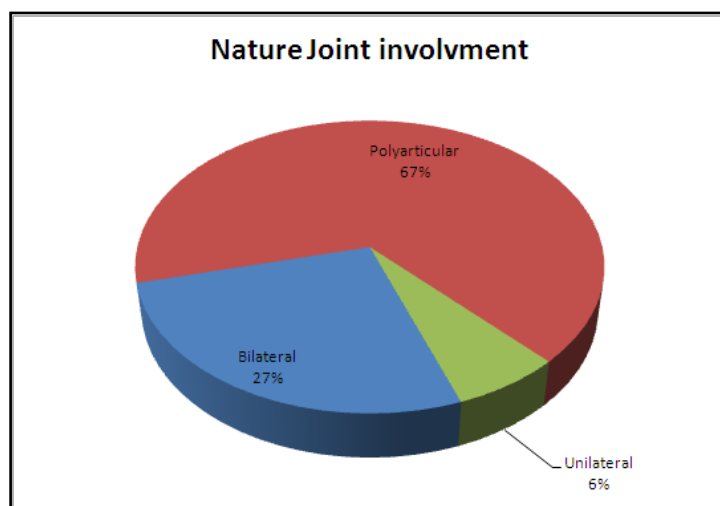
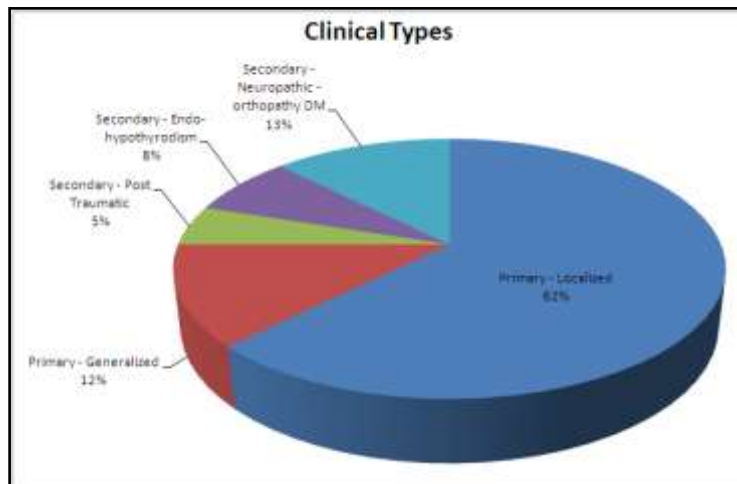
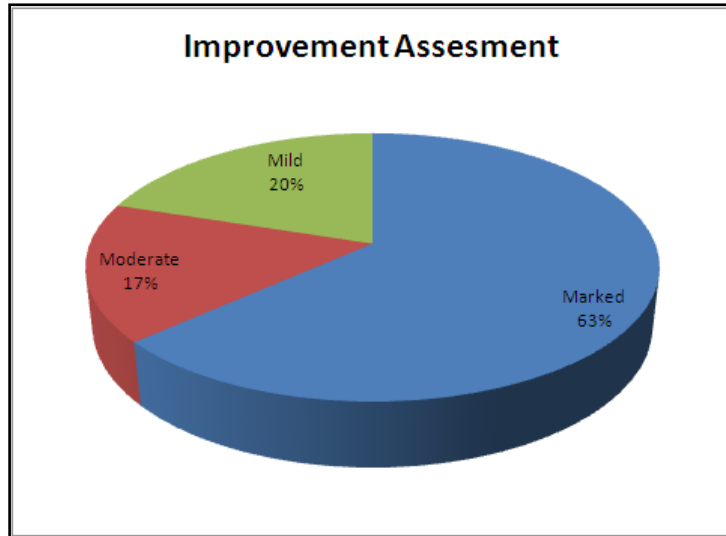
Table: 8 T-Test Results

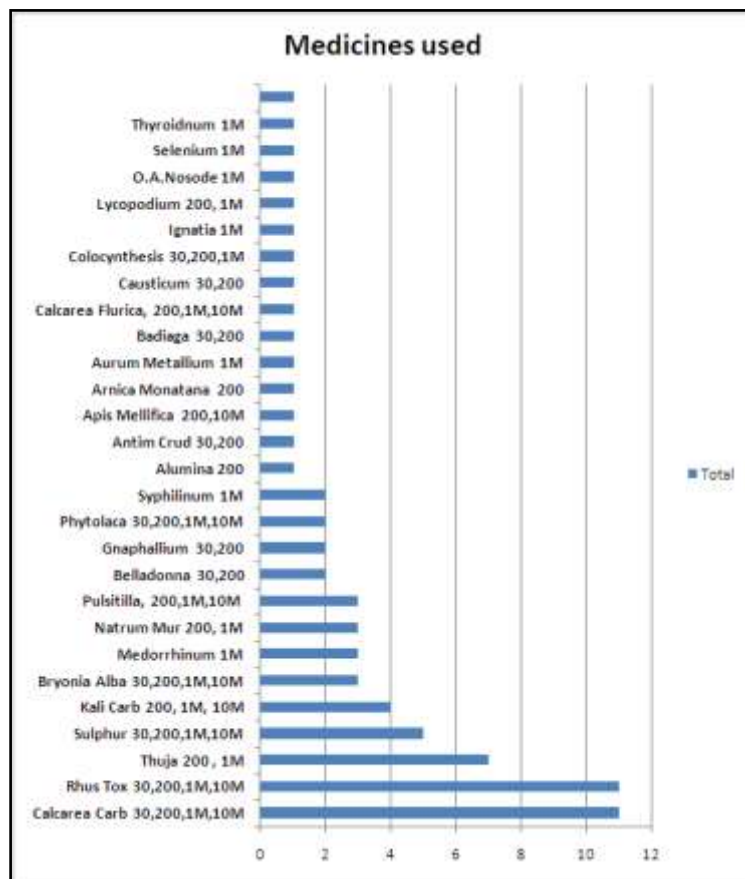
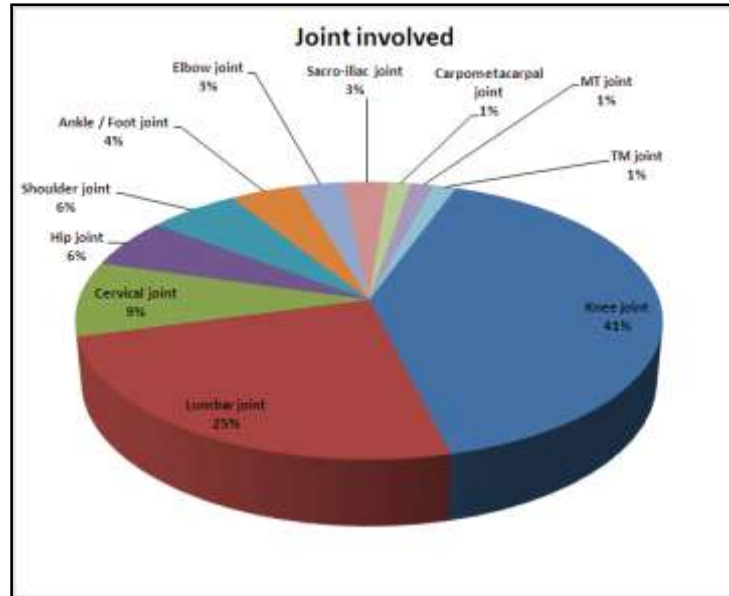
PAIR	PAIR 1	PAIR 2	PAIR 3	PAIR 4
PAIRED DIFFERENCE	COMPLAINT	PAIN (BEFORE-AFTER)	STIFFNESS (BEFORE-AFTER)	PHYSICAL FUNCTION (BEFORE-AFTER)
				NRS (BEFORE-AFTER)

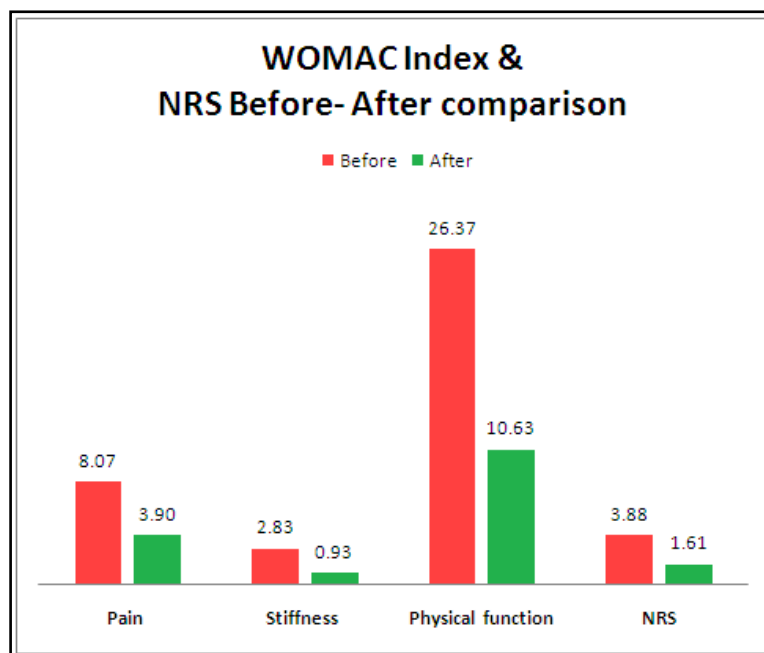
DESCRIPTIVE STATISTICS OF PAIRED DIFFERENCE	MEAN (μ)	4.17	1.9	15.73	2.27
	SD (σ)	4.61	2.27	16.83	2.31
MARGIN OF ERROR	SEM	0.84	0.41	3.07	0.42
	OF	1.65	0.81	6.02	0.83
95 % CI OF THE DIFFERENCE	LOWER	2.52	1.09	9.71	1.44
	UPPER	5.82	2.71	21.75	3.1
T-TEST VALUE	T-TEST	5.27	5.04	4.38	7.09
	DOF	29	29	29	29
PAIRED SAMPLES T-TEST	P	0.001	0.001	0.001	0.001

Table 9: Medicines

MEDICINE NAME	TOTAL	MALE	FEMALE
CALCAREA CARB 30,200,1M,10M	11	2	9
RHUS TOX 30,200,1M,10M	11	3	8
THUJA 200 , 1M	7	1	6
SULPHUR 30,200,1M,10M	5	2	3
KALI CARB 200, 1M, 10M	4	0	4
BRYONIA ALBA 30,200,1M,10M	3	0	3
MEDORRHINUM 1M	3	0	3
NATRUM MUR 200, 1M	3	0	3
PULSITILLA, 200,1M,10M	3	0	3
BELLADONNA 30,200	2	0	2
GNAPHALLIUM 30,200	2	0	2
PHYTOLACCA 30,200,1M,10M	2	0	2
SYPHILINUM 1M	2	0	2
ALUMINA 200	1	0	1
ANTIM CRUD 30,200	1	0	1
APIS MELLIFICA 200,10M	1	0	1
ARNICA MONTANA 200	1	1	0
AURUM METALLIUM 1M	1	0	1
BADIAGA 30,200	1	0	1
CALCAREA FLURICA, 200,1M,10M	1	0	1
CAUSTICUM 30,200	1	0	1
COLOCYNTHESIS 30,200,1M	1	0	1
IGNATIA 1M	1	0	1
LYCOPODIUM 200, 1M	1	1	0
O.A.NOSODE 1M	1	0	1
SELENIUM 1M	1	0	1
THYROIDNUM 1M	1	0	1







FORMULAE:

- The Standard Deviation for Pain (Before/After/ before-After) is calculated as (3.20 / 2.91 / 4.61).
- The Standard Deviation for Stiffness (Before/After/ before-After) is calculated as (1.79/1.03/2.27).
- The Standard Deviation for Physical Function (Before/After/ before-After) is calculated as (8.88 / 7.69 / 16.83).
- The Standard Deviation for NRS (Before/After/ before-After) is calculated as (1.28 / 1.09 / 2.31).
- The t-test was applied on the sections of WOMAC index scores for pain, stiffness, physical function & NRS. We consider the following hypothesis
 - H_0 = Homeopathic medicines prescribed are not effective;
 - H_1 = Homeopathic medicines prescribed are effective.
- The t-test scores evaluated were as follows 5.27 for Pain, 5.04 for Stiffness, 4.38 for Physical Function and 7.09 for NRS.
- To find the value from t-test table we have considered Degree of Freedom (d.o.f) = no of patients (30) – 1 = 29 and Level Of Significance (l.o.s) 0.001.
- The corresponding t-test value for above parameters of d.o.f and 0.1 % l.o.s. is 3.659 from the t-test table.

- We reject the Null Hypothesis at 0.1% l.o.s. since calculated values of t (5.27, 5.04, 4.38, and 7.09) are *greater than table value of t* (3.659).
- *Therefore we can say that the homoeopathic medicines prescribed in the study are effective.*

FINDINGS :

1. The improvement of individual patients assessed in table no 1. Marked improvement shown in 19 patients (3 male and 16 female). Moderate improvement shown in 5 patients (3 male and 2 female) patients .Mild improvement was seen in 6 patients (1 male and 5 female).
2. The remedies used in 30 cases were Calcarea Carb (11), Rhus Tox(11 pts), Thuja (7 pts) ,Sulphur(5pts), Kali Carb(4pts),Bryonia Alba(3 pts), Medorrhinum (3pts), Natrum Mur(3 pts) , Pulsatilla(3pts) , Belladonna(2pts), Gnaphallium(2pts) , Phytolacca(2 pts),Syphillinum(1pt),Alumina(1pts),Antim Crud 1pt),Apis Mellifica(1pt), Arnica Montana(1pt) , Aurum Metallicum(1pt) ,Badiaga(1pt), Calcarea Flur (1pt)Causticum(1pt),Colocynthisis(1pt), Ignatia(1pt), Lycopodium(1pt),O.ANosode(1pt),Selenium(1pt),Thyroidinum(1pt),Valeriana(1pt).
The most frequently medicine is Calcarea Carb and Rhus Tox used in 11 patients (36.66%). *Arnica Montana, Belladonna, Rhus Tox, Bryonia Alba, Apis Mellifica, Gnaphallium,Phytollacca, Colocynthisis, And Valeriana* was prescribed during acute episode with repetition of doses on basis of acute totality and having no inimical relation with previously administered medicine. *Syphillinum, Thyroidinum, Thuja, Sulphur* used anti- miasmatic prescription intercurrently in cases where after selection of proper medicine improvement is not shown which gives good results.
3. The Mean Pain Score with WOMAC OA Index LK3.1 survey form improved from 8.07 to 3.90. The Mean Stiffness improved from 2.83 to 0.93. The Mean Physical Function (Quality Of Life) improved from 26.37 to 10.63. The NRS improved from 3.88 to 1.61. We reject the Null Hypothesis at 0.1% l.o.s. since calculated values of t (5.27, 5.04, 4.38, and 7.09) are greater than table value of t (3.659).
4. *Therefore we can say that the homoeopathic medicines prescribed in the study are effective.*

DISCUSSION :

My topic of dissertation is “The Efficacy of Homoeopathic Medicines in management for Osteoarthritis”. The Prospective Observational study was carried out with detail case study.

Total patients: The total 62 patients are registered for study and 32 patients (51.61%) are dropped out from study. The main reason of dropped out was the lack of proper knowledge in rural people about homoeopathic treatment in cases of OA and poor financial background. Most patients were abusing analgesics and steroids without any proper medical advice. The steroid dependent OA patients were giving poor response to treatment.

Gender ratio: The literature was confirmed by observing the increased prevalence of the OA among females than in males. The study of 30 cases includes female 23 i.e. 76.6% and male 7 i.e. 23.3%.

Clinical types: The clinical types of osteoarthritis also studied in table 7. The primary localized OA was observed in maximum patients i.e. 25 patients i.e. 83.33% (7 males and 18 females). Primary generalized OA was observed in 5 female patients only. In 3 female patients Hypothyroidism is observed along with OA. In 5 patients i.e. 2 male and 3 females having diabetes mellitus along with OA.

Joint involvement: The specific joint involvement was assessed in table 10. The most frequently involved joint in OA was knee joint. Maximum involvement of knee joint and lumbar joints seen in female patients.

Remedies prescribed: The most frequently medicine is Calcarea Carb and Rhus Tox used in 11 patients (36.66%).

Potency prescribed: All the medicines were prescribed in 30C 200C raising potency 1M, 10M potency and selection was as per the susceptibility of individual patient.

Response to the treatment: The improvement of individual patients assessed in table no 15. Marked improvement shown in 19 patients (3 male and 16 female). Moderate improvement shown in 5 patients (3 male and 2 female) patients .Mild improvement was seen in 6 patients (1 male and 5 female).

Homoeopathic medicines help in improving ADL (activity of daily living) by reducing pain, stiffness and limiting the disease process. Protection of the OA joint from further damage by reducing stress on the joint like avoid squatting position, excessive use of stairs, using Indian

toilets, attenuating joint forces and improving biomechanics. Among obese weight loss can significantly reduce and prevent damage of joint cause due to obesity.

Relation between and subjective and objective symptoms the radiological finding is not strong. It is common for patients with radiological OA there are no symptoms few. Classical OA may occur in the without any of structural changes on radiograph. The patients were followed up for 3 months which is a very minimum time to assess the progression in OA. OA is a gradual process which can occurs over years or decades. The rate of progression is differs between individual to individual that's why many patients with clinical evidence of OA may not suffer considerable progression either by symptoms or any radiographic changes. Patients with such chronic disease are subject to change the therapy very often on account of their sufferings. So the period of therapy is small to evaluate the progression of the disease if patients are continuing long-term homoeopathic treatment will cause significant relief in pain and improvement in quality of life shows that the efficacy of homoeopathic medicine in cases of OA.

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Sr No	Abbreviation	Full Form
1	OA	Osteoarthritis
2	WOMAC	Western Ontario and McMaster Universities
3	QOL	Quality of life
4	ACR	American criteria of Rheumatology
5	NRS	Numerical rating scale
6	BMI	Body mass index
7	SD	Standard deviation
8	SEM	Standard Error of Mean
9	CI	Confidence interval
10	d.o.f	Degree of Freedom

AYURVEDIC APPROACH FOR MANAGEMENT OF BRONCHIAL ASTHMA

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Abstract

Asthma is stated as a disease characterized by airway inflammation and increased responsiveness of the tracheo-bronchial tree due to multiple stimuli resulting in symptoms such as wheezing, cough, chest tightness and dyspnoea. World health organization declares 100 and 150 million people around the globe suffer from asthma and this number is rising. World-wide, deaths from this condition have reached over 180,000 annually¹. Tamak Shwasa can be co-related with Bronchial Asthma in modern sciences, which is consider as life-threatening disease. In Ayurveda, Tamak shwasa is also explained as Pranhara, Ashukari i.e. life threatening disease by Charakacharya². Causative factor of Tamak Shwasa includes kaphakara ,Vata Prakopa which subsequently leads to the diseases of Pranvaha Strotasare repeated drinking of cold water, heavy exercise, repeated sexual activity, atichankraman, rukshaa ahar, vishamasan, aam, food including milk and milk products such as curd, sesame oil, butter,black gram, fruit like banana, custard apple etc. These can be consider as lifestyle changes.In modern medicine, environmental pollution is one of the imp factor asthma which is increasing across the globe . Hence, here an attempt to elaborate an ayurvedic approaches for prevention as well as treatment of Tamak Shwasa.

Keywords:- Tamak Shwasa, Shwasa, Asthma, Bronchial Asthma, Pranvaha strotasa, lifestyle disease,



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Ayurveda is the ancient Indian medical science which has aim (*Prayojanam*) to not only cure i.e. treatment but also gives equal importance in prevention³. The word *Shwasa* is used to denote respiration and exchange of air in the body⁴. Thus *hwasaroga* may be defined as the disease in which the respiration and exchange of air is disturbed, increased rate of respiration, choking sensation, stiffness in head , suffocation etc. Bronchial asthma mentioned in modern sciences, can be correlated with Tamak Shwasa mentioned in our Ayurveda *Tamak Shwasa*, is one of the types of *Shwasa*, also considered as disease. It is consider as disease of Pranvaha Srotas..The different meaning of *Tama* is to congestion, to choke, be suffocated, to be exhausted, to be unease and to be distressed. Charakacharya has also explained it as *pranhara*, *ashukari* and *ghora*. If it is left untreated or not treated in time it is fatal in nature. It can be correlated with bronchial asthma. Although various studies have been performed across the globe in last few decades and some good drugs are discovered, it shows clear

indication that the prevalence of *Shwasa* (Asthma) has increased significantly in all the age groups.

Nidanparivarjan i.e. avoiding causative factor is import part of treatment. The hetu i.e. aetiological factors of Tamak Shwasa should be avoid. The *Hetu* which are responsible for *Pranvaha* Strotodushti are also the causative factors of Shwasa. They are as follows :-

क्षयात्संधारणाद्रौक्षात् व्यायामात् क्षुधितस्य च । प्राणवाहीनि दुष्यन्ति स्त्रोतांस्यन्यैश्च दारुणः ॥ च. वि.

५/१८*४

As per stated above by *Charaka*, *Stroto-Vaigunya* and *Doshprakopa* are the two main factors which are responsible for the causes of *Shwasa Vyadhi*. These *hetu* produces *Vata Prakopa* which subsequently leads to *sthan-vaigunya*, *marmopghata*, *raja*, *dhooma*, *shit seva*, *pratighata* are some factors which are responsible for *strotovaigunya*. The diseases of *Pranvaha Strotas* including *Shwasa Vyadhi* are mainly due to *Kapha* and *Vata dosha*. Other *hetus* are repeated drinking of cold water, heavy exercise, repeated sexual activity, *atichankraman*, *rukshaahar*, *vishamasan*, *aam*, food including milk and milk products such as curd, sesame oil, butter, black gram, fruit like banana, custard apple etc. are some of those factors which produces *Kapha* and *Vata dosha*.

Lifestyle now a days is most important cause for *dosha prakopa*. Such causes includes lack of exercise or heavy exercise, irregular and improper food habits, junk food , cold drinks, physical as well as psychological stress, irregularity in sleep, various addiction which may cause *dosh prakopa* which makes increase in prevalence and *vega* of *Tamak Shwasa*. Considering hetu of Tamak Shwasa, they can be divided in hetu responsible for *Strotovaigunya* and *Hetu* - responsible for *Dosh-prakopa*. Lifestyle, all of us following are most imp factor to be avoided.

In modern medicine for epidemiological and clinical purposes, asthma is classified by the principal stimuli that provoke with acute episodes. In majority of patients, personal, familial and occupational history of allergy to multiplicity of allergens has been observed.

Therefore, one can describe two broad types of Asthma:-

- 1) Atopic or Allergic or Early - onset asthma or Extrinsic Asthma.
- 2) Non-atopic or Non-Allergic or Late - onset Asthma or Intrinsic Asthma.

They are as follows :-

1) Atopic or Allergic Asthma or Extrinsic asthma:-

I. Triggering factors are allergens. They enter the bronchi with the inspired air and are derived from organic material such as pollen, mite containing house dust, feathers, animal-dander and fungal spores. This type of asthma is commonly begin in childhood and is generally occurs in atopic individuals preceded by infantile eczema and hypersensitivity of food.

2)Non -atopic or non-allergic or Intrinsic asthma:-

No clinical evidence of external allergens as triggering factors. The majority of patients in this particular type of asthma are adults and therefore it is called as late-onset asthma. Attacks increases in severity as year pass. Non immune abnormal autonomic regulation of airway

Irritant factors and provoking factors:-

1) **Infection** :- Respiratory infections , respiratory viruses are the major etiological factors.

2) **Exercise** :- It is a very common precipitant of acuteepisodes of asthma. The mechanism is related to a thermally produced hyperemia and engorgement of the microvasculature of the bronchial wall.

Emotional stress:-Feeling of anxiety, stress, depression canalter the bronchial reactivity. The Exact pathology is yet toascertain but endorphins may play a vital role in precipitating asthma.

4) Some miscellaneous irritants:-

a) Metal Salts - platinum, chrome, nickel.

b) Wood and Vegetable dust - Oak, Western red cedar, grain, flour, castan bean, green coffee beans, , gum acasia, karaygum, tragacanth.

c) Pharmaceutical agent's :- Antibiotics, β -blockers.

d) Industrial chemicals and plastics.

e) Biological enzymes: - Laundry detergents, pancreatic enzymes.

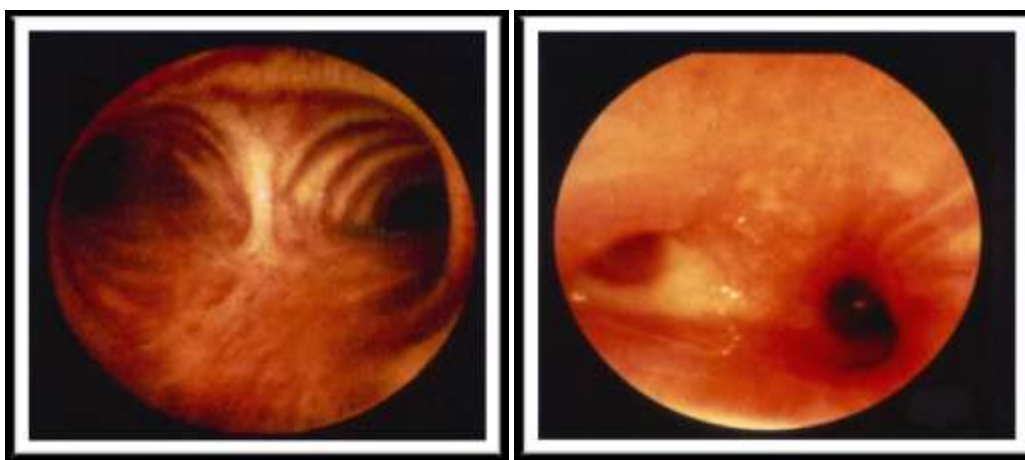
F) Cold air.

Mechanism of airway hyper responsiveness in Asthma can be describe as :-

1. Excessive contraction of airway smooth muscle.

2. Uncoupling of airway contraction due to of inflammatory changes in the airway wall may lead to excessive narrowing of the airway.

3. Thickening of airway wall by edema and structural changes amplifies airway narrowing.



Images above shows - Normal Airway and Airway during exacerbations of Asthma respectively.

Symptoms of Shwasa mentioned in various Ayurvedic samhita includes *Tivra Shwasvega* (Increased Rate of Respiration) , *Pinas* (Coryza), *Ghurghurak* (Wheezing sound), *Shirograha*&*Manyagraha* (Stiffness in Head and neck respectively) ,*Pratama* (Blackout), *Pramoha* (Momentary loss of Consciousness),*Shleshma Vimokshante Sukhumi* (Relief after expectoration),*Sakshta bhashan*(Dyphonoa) *Anidra* (Insomnia) *Shayane Shwaspidā* (Dyspnoea in Laying down Position) , *Asino Labhate Saukhyam* (Relief in Sitting Position), *Ushnabhinandanam* (Relief after hot things) *Lalat Sweda* (Sweat on forehead) etc.

As described earlier in Hetu, Megh (rainy environment), Ambu (cold water), Pragvata (wind from east side), Kapha Sanchay in Pranvaha Strotas, increases asthmatic attacks.

Ayurveda always preferred prevention than the treatment. Hence Pathya, Apathya has mentioned for all the diseases very specifically. Pathya is a term applicable for a specific diet (*Ahar*) and *Vihar* which does not interfere with the pathology of a particular disease but helps to soothen the ill - effects of that disease. *Apathya* is exactly opposite to Pathya and worsens the disease.

Diet	Pathya	Apathya
Cereals	Wheat, old rice, yava	Corn
Pulses	<i>Kulattha</i> , <i>Masur</i>	<i>Muga</i> , <i>Masha</i> , <i>Til</i>
Vegetables	Brinjal, Ginger, Carrot, Garlic	Potato, Suran
Fruits	Grapes, Lemon	Pineapple, Banana
Meat	From Jangal Pradesh	Fish

Management of Shwasa :-

The important line of treatment for Shwasa in ayurveda is-selection of medicines and *Ahar - Vihar* which are having *Vata Dosh prakopak* but *Kapha Dosha Nashak* and *Kapha Doshaprakopak* but *Vatadoshanashak* properties is advised.

Shaman Chikitsa :- “ यत्किञ्चित् कफवातघ्नमुष्ण वातनुलोमनं ।

... कार्यं नैकान्तिकं ताभ्यां प्रायः श्रेयोऽ निलापहम् ॥”च. चि.१७/१४७-१४८^५

The *chikitsa sutra* of *Shwasa* indicates *Vatanuloman* is *main chikitsa*. So, it can be narrated that they acts in *Shwasa vyadhi* by following manner- *Kapha Vilayana* , *Sanchit Aama Nirharan* ,*Dosh Shaman* ,*Vatanuloman* , Decreasing *Srotorodh* , Decrease in number of *Shwasa Vega*.

“ सर्वेषां बृहणे ह्यल्पः शक्यश्च प्रायशो भवेत् । नात्यर्थं शमनेऽपायो भृशोऽशक्यश्च कर्शने ॥

तस्माच्छुद्धानशुद्धांश्च शमनैर्बृंहणैरपि । हिक्काऽऽसादितान्जन्तून् प्रायशः समुपाचरेत् ॥ ”

च.चि.१७/१४९,१५०^६

Tamakshwas is *Amashayodbhava Vyadhi*. *Prakupit Kapha (Kledak Kapha)* and *Aam* obstruct the *Pranvaha Strotas* and produces *Shwasa*. '*Langhana*' is the choice of treatment if *Samprapti* take place due to *Prakupit Kapha &Aam*. The site of occurring *Tamakshwasa* is *Pranvaha Strotas* and there is *Pranvayu Dushti* in it. As there is *Pranvaha Dushti* occur in *Tamakshwas*, *Brunhan Karma* is carried out which gives *Bala* to the *Pranvaha Strotas* and also not *Vitiates Vata Dosh*.Special procedure is carried out for *Kapha - Vilayan* and *Vatanuloman*. The procedure include *snehan* with *Til Tail* and *saindhav* over chest and back followed by *Snehan* and *Nadi - Swedan*.

Shodhan Karma :-

स्विन्नं ज्ञात्वा ततस्तूर्णं भोजयेत् स्निग्धमोदनम् । मस्यानां शूकराणां वा रसैर्दध्युत्तरेण वा ॥

ततः श्लेष्मणि संवृद्धे वमनं पाययेत्तु त्तम । पिप्पलीसैन्धव क्षौद्रैर्युक्त वातविरोधि यत् ।

निर्हते सुखमाप्नोति स कफे दुष्टविग्रहे । स्रोतः सु च विशुद्धेषु चरत्यविहतोऽनिलः ॥ च.चि.१७/७४-७६^७

Snehan and *swedan chikitsa*, *Kaphaprakopak Ahar* like curd- rice, fish and pork meat is given for *vitiations of Kapha Dosha* because of which *Vaman Karma* occurs without any complication. *Pippali Churna*, *Saindhav* and *Honey* is used as *Vamak Dravya*.

लीनश्चेद्दोषशेषः स्याद् धूमस्तं निहरेद् बुधः । च.चि.१७/७७

Virechan Chikitsa is also effective in *Tamak shwasa Vegavastha*. As stated earlier *Pranvayu* gets *Pratilom Gati*. *Pranvayu* is always *Adhogami* in nature. *Virechan Karma* helps to regain its *Adhogati* and restores its normal physiology. Also *Virechan Karma* acts to reduce the obstruction caused by *Kapha Dosha*.

Nasya chikitsa :-

लशूनस्य पलाण्डोर्वा मूलं गृजनकस्य च । नावयेच्चन्दनं वाऽपि नारिक्षीरेण संयुतम् ।। च. चि. १७/१३१६

Charaka has explained *Nasya chikitsa* with *Teelshnagandhi dravyas* like *Lashoon, Palandu, Sugandhi dravyas* like *Chandan* etc. These *gandha dravya* helps in relieving *Srotorodh* by their *Teekshna, Sukhshma guna*.

Avegkalin Chikitsa :-

Avegakal is duration between two attacks and the *Avastha* is called *Avegavastha*. In this period sufferer should receive treatments which is having *Balya* properties for *Pranvaha Strotas - Rasayan Chikitsa*. Also patient should keep a good vigilance on *Ahar, Vihar*, which is known as *Pathyapathya*. *Chousashthi Pippali, Chyavanprashavaleha, Dhatri Avaleha* and *Bhallataka kalpa* are used as *Rasayans* for *Pranvaha Strotas*.

Here is a attempt done to elaborate an ayurvedic principles for prevention and management of *Shwasa* i.e. *Asthma*, which has increasing prevalence all over the world.

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ROLE OF UTTARBASTI IN INFERTILITY

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Abstract

Infertility is the most common gynaecological problem. By Ayurveda we achieve conception by natural method to give a healthy offspring. Uttarbasti is one among the Panchakarma treatments. Here liquid medicines were administered through urethral or vaginal routes. Thus, uttarbasti targets toward disease of genital system. The medicines may be in the form of Kwath/Kashaya i.e. Asthapan/NiruhBasti and Sneha Basti i.e. AnuvasanBasti. Ayurveda contributes very important role in treating disorders responsible for infertility. Uttarbasti- Acts on endometrial receptors. The Uttarbasti has a cleansing action especially NiruhBasti. Anuvasanbasti given in the form of uttarbasti is highly effective in cases of sterility and impotence.

***Keywords:** Infertility, Panchakarma, Uttarbasti, Ayurveda, Vandhytava.*



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Introduction

Vandhytava (infertility) is the worldwide issue. Infertility is also defined in specific terms as the failure to conceive after a year of regular intercourse without contraception according to modern science. Treatment is available in allopathy stream but has many side effects and very expensive. So, it's necessary to find out the solution which has less complication and cost effective. Ayurvedic classics had described measures of using Panchakarma especially Uttarbasti with respect to various factors of infertility.

Materials and Methods

Hetu of Vandhytava: As per ayurvedic text,

1. Beejadushti
2. Rutukaal
3. Mithya aaharvihar
4. Kshetra (reproductive organ)

Modern factors:

In Females,

1. Congenital Anomalies
2. Ovulation disorder
3. Uterine fibroids
4. Blocked fallopian tubes

In Males,

1. Volume of semen
2. Sperm count- Oligospermia, azospermia, Necrospermia
3. Motility of sperm
4. Structural defects of sperms- due to vitiated vatadosha
5. Any obstruction in genital tract
6. Erectile dysfunction

Uttarbasti:

UttarmargendeeymaantathaShresthagunatayachuttarbastihi (Ref. Charaka Siddhi 9/50, Chakrapani commentary). The basti administered through the urinary passage (urethra) in men and women and through birth passage (vaginal tract) in women is called uttarbasti.

Mode of action of Uttarbasti:

Uttarbasti contributes very important role in treating infertility because it has direct local action in reproductive system. It also helps to increase receptivity of genital tract to entry of sperms. Ovaries contain receptors which receive hormones secreted by hypothalamus and pituitary gland. The drug stimulates these receptors, so that proper ovulation occurs in each cycle.¹ Uttarbasti relieves tubal block by lysis of adhesions and relieves obstruction.² In cervical factor, drug administered locally in the cervix and absorbed by cervical epithelium due to sukshma property of drug. The lipid soluble drug is passively diffused across the membrane in the direction of its concentration gradient. The rate of transport is proportional to lipid: water partition coefficient of the drug. The more lipid soluble, higher is the concentration and quicker diffusion. In this way altered cervical pH can be corrected by Uttarbasti.³

Uttar basti fortifies the concerned organs, cures the diseases, enhances immunity, and keeps the organ clean, healthy and sterile. It helps in preparing the uterus for conception and

begetting healthy children. Thus Uttar basti is a gift of Ayurveda for those who are suffering from infertility and impotence.

As Acharya Charak explain in Siddhistan,

“Uttaranamshreshtanambastinamsiddhihiuttarbastisiddhi”. Uttar basti is the shreshtabasti. Yapnabasti it can be given in any rutu. Baladiyapnabastitritiya, sthiradiyapnabasti Govrishadibasti, Madhuaadibasti. Male infertility can be treat by this basti⁶.

Treatment protocol

Quantity of uttarbastidravya-

According to Charak, the quantity of uttarbasti medicine should be ½ pala . Vagbhata has mentioned the same quantity. Sushrut has indicated the quantity of uttarbasti medicine as 1 prasuta as measured by the hands of the women taking uttarbasti, for garbhashaygatabasti. This is the quantity of Sneha. If kwatha is to be administered in uttarbasti, 2 prasuta quantity should be given.

According to Sushrut, the quantity of Sneha for men should be 4 tola.

Uttar bastividhvidhan(Method of administration)

The patient was admitted for Uttar basti, A day after cessation of menstruation. Snehana of bala taila⁸ on the lower abdomen, back and lower limbs followed by Nadisweda with water steam on the lower abdomen and back was given to patients before each uttarbasti. Yoni prakshalan with panchvalkal kwath⁹ was performed to sterilize the peri vaginal part. It is an OPD based procedure. Indicated BastiDravya is introduced into vaginal tract with the help of rubber catheter under aseptic precautions.

In male patients, after the snehana, swedan procedure the bladder sound should be slowly introduced into urethra and passage tracked up to the urinary bladder. This bladder sound will also clear the any blockages present in the urinary tract. Now rubber catheter is slowly introduced into urethra. Then indicated bastidravya slowly pushed into the urinary bladder. Then catheter is removed.

Paschatakarma

If the given Sneha does not return, then it should be observed for 24 hours. If it fails to return, then Shodhanaushadis should be used¹⁰.

Discussion:

The present study was aimed to find out the role of uttarbasti in infertility. Basti is mainly indicated in vata dominant and also avarodhajanya and dhatukshayajanya can be managed by basti. Charakacharya explained the action of basti by giving example of a tree, as a tree is irrigated at its root level, attains branches with beautiful tender leaves and flowers in the due course. Hence uttarbasti is beneficial in Polycystic Ovarian Disease, tubal block, menstrual disorders and anovulatory cycles, low sperm count etc. Proper selection of drug and time of administration is very essential for getting the exact results.

Conclusion:

By this study it was proved that uttarbasti in all major factors Polycystic Ovarian Disease, tubal block, menstrual disorders and anovulatory cycles, low sperm count has positive effect. An ovulation is considered as major ovarian factor for infertility⁴ which can be treated by uttarbasti very easily. Finally, it is concluded that Uttarbasti is boon for infertility patients as an effective, simple and cost-effective treatment.

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AN ARTICLE ON AYURVEDICVIEW OF CHILDHOOD OBESITY

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INTRODUCTION:-

Life style diseases (also sometimes called as diseases of longevity or diseases of civilization.)are the diseases that appear to increases in frequency as the countries become more *industrialized and* globalized.

Obesity is the most common pediatric health problem in developed as well as developing countries. Diet and life style are the major factors influencing the susceptibility to many diseases like Type-2 DM, heart and kidney disease, O.A etc thus increasing the mortality rate.

According to WHO obesity is defined as follow:- 1. BMI greater than or equal to 25 is over weight. 2. BMI greater than or equal to 30 is obese. When the child is on his 97th centile is said to be over weight where as , when the child is on his 120th centile is said to be obese.

The etiological factors are over eating or eating junk food, lack of physical activities, improper sleeping patterns etc. These etiological factors are responsible for *Agnidushtithus* affects the *MedaDhatvaagni*.Thus, leading to *strotorodh* of *Medadhatuand* vitiating *Vataand Kaphadosha*and resulting in *Sthaulya*or childhood obesity.

In the prevention and management of childhood obesity one must rule out hormonal imbalances, genetic disorders etc.

In this lifestyle oriented disorder, *Ayurveda* plays a vital role. According to *AyurvedaAgnidushti* is the main cause of obesity. It can be treated by internal medications and panchkarmatherapies. Also, a bit change in diet and lifestyle and dietary habits will help in curing obesity in children and thus preventing the further consequences.

PURPOSE:-

Obesity prevention is an international public health priority. Change in diet, following *Dinacharya*, *Rutucharya* along with panchkarma therapies and internal medications helps in the management of childhood obesity and thus overcoming further consequences.

MATERIALS AND METHODS :-**REVIEW OF LITERATURE:-**

The Ayurvedic perspective of *Sthaulya* or *Medoroga* is collected from Ayurvedic classics, where as the matter of childhood obesity is collected from books of Pediatrics in modern science.

AYURVEDIC VIEW:-

Sthaulya or *Medoroga* according to *Charaka Samhita* is described as one of the *Ashtaunindita* (8 most criticized disease). The etiological factors of *Sthaulya* in children are over eating or overfeeding by parents, Lack of physical activities, improper dietary habits like intake of junk food, unhealthy food items and improper sleeping patterns.

In Ayurvedic terminologies these etiological factors are *kaphadosha* propogating *guru, snigdha, adhyashana, atyashan, atinidra and avyayam*. According to *Vagbhata Samhita*, the characteristics of *Sthaulya* or childhood obesity is described as pendulous movement of buttocks, abdomen and breasts while walking (*Nitamb, Stana and Udaralambanam*). This pendulous movement is due to deposition of excessive *Meda* and *Mansa dhatu* (Fats). Further *Sthaulya* is associated with excessive foul smell sweating (*swedadurgandhi*) from axilla and having bad body odour (*gatragandha*).

The pathogenesis of *Sthaulya* occurs due to etiological factors which results in vitiating *kapha* and *vata* dosha further leading to *Agnidushti* (resembles abnormal increase in appetite and food absorption). Later due to *medadhatva agnimandyamedovaha strotas* get obstructed (*strotorodha*). Thus, leading to increase in *dushta Medadhatu* (unwanted fats deposition) and the child is becomes *sthoolor* obese.

In *Sthaulya* or childhood obesity Ayurveda plays an important role. The management of *Sthaulya* include following:-

5. Change in dietary habits without hampering the growth and development of the child. It includes various Ayurvedic recipes that can be served to a child either in the form of supplements or snacks eg avoid drinking excessive water, chilled water, having Luke warm water daily instead of normal water.

6. Changes in the life style of parents so that of children. That is, following proper sleeping patterns, avoiding sleeping at the day time and regular physical activities.
7. Internal medications like *Shivagulika, Navakguggul, Takrarishta, Lohasava, Punnarvamandoor, Dashmoolkwath, Trifalakwathetc.*
8. Panchkarma therapies like *RukshaUdvartana, Snehana, Swedana, Lekhanbasti* above 12 yrs of age is useful in the management of *Sthaulya*.

AYURVEDIC PERSPECTIVE OF CHILDHOOD OBESITY :-

Ayurvedic Perspective of childhood obesity include the change in the dietary habits of children by adding Ayurvedic recipes as supplements which will indirectly help in controlling weight by improving *Agni*. Secondly, changes in life style like Lack of physical activities, improper sleeping patterns can be improvised by counseling.

Children should get all the essential nutrients from food as it is very much important for their overall growth and development. counseling

Without changing the dietary requirements one can give food items in the form of supplements which can help in reducing and controlling weight

Some of the *Ayurvedic* recipes which helps in reducing weight are as follows :-

12) *MadhudakPrayoga (Chakradatta)* :-

Ingredients :- Honey, Lukewarm water.

Preparation :- Take 250ml of lukewarm water and add 1 spoon of Honey to it.

Dose :- Daily 150-200ml of water early morning empty stomach.

Duration :- 6 months.

Actions- It helps in dissolving and liquefying the unwanted *Medadhatu* without affecting any of the *doshas*

13) *MandaPrayoga(Chakradatta)* :-

Ingredients :- *Puranshali*(rice), water(14times), *Sauwarchal*.

Preparation :- 1 cup of *puranshali* to which add 14 times of water and is cooked on the low flame gas, *sauwarchal* is added to taste. The flame is stopped once the *puranshali* are cooked evenly.

Dose :- ½ - 1 bowl on demand.

Caution :- To be served warm or lukewarm.

Action :- Helps in correcting *Agnidushti* and *Medagnivardhan* .

14) *SattuPrayoga (Chakradatta):-*

Ingredients :- Initial stage of curd i.e. curd water or *mastu* , *Sauwarchal*, *Panchakol*, *Hingu*, Honey.

Preparation :- Curd water or *mastu* is taken in bowl to which *Pachakol*, *Sauwarchal* is added as per taste, for palatability honey is added as per requirement. It is evenly mixed.

Dose :- ½ - 1 bowl on demand.

Caution :-To be served with lukewarm water, Avoid serving at night.

Action :- It helps in correcting *Agnidushti* and also overcoming obesity.

15) *ErandaKsharaPrayoga(BhaishajyaRatnawali) :-*

Ingredients :- All parts of *Eranda*(*Ricinuscommunis*), water.

Preparation :- All parts of *Eranda* are burnt evenly to which 4 times water is added and is kept overnight. Later the above clear water is discarded and the desired quantity of water is added to the blackishcolour ash.

It is uniformly mixed. It is then allowed to settle for next 6-8 hours. The settled mixture is then heated on a low flame in such a way that the water is evaporated. At the end, white coloured ash is seen and it is collected accordingly. This *ErandaKshara* is given with *ghritabharjitaHingu* in a *Manda* or *sattuPrayoga*.

Dose :- 1 – 5 mg with *Manda* or *sattuprayoga* on demand.

Action :- Corrects *Agnidushti*, *Vata&Kaphadosha* and also reduces unwanted fats.

16) *Triphalakwath(Yogaratanakara) :-*

Ingredients :-*Triphala (Haritaki, Bibhitaki, Amalaki)*, water, Honey

Preparation :-*Triphala* in their coarse forms are taken & to which 16 times water is added. It is then kept on low flame in such a way that only 1/4th of the water remains. The *Kwatha* or decoction is then cooled. Honey is added for palatability.

Dose :-5 - 15ml/day can be given in the form of health drink 1 or 2 times a day.

Action :-*Triphala* itself is indicated in *sthaulya* as it does*Karshana*.

17) *FalatrikadiChurna (Yogaratanakara) :-*

Ingredients :-*Triphala, Trikatu (Shunthi, Maricha, Pippali)* , oil, *Sauwarchal*, Honey.

Preparation :- All the *Churnas* are mixed uniformly and to which oil, *sauwarchalis* added. Honey is added for palatability.

Dose :-125 - 500mg daily once.

Duration :- 6 months.

Action :- It helps in correcting *Medadhathu* and *kapha, vatadosha*.

18) *Moog, Kultha*, Rice in the form of *peya, vilepi, Akruta, KrutaYosha*, can be given to children by adding *sauwarchala* to it.

19) **Importance of water in *Sthaulya*(Obesity):-** *AcharyaVagbhata* in his *sutrasthanas* mentioned the importance of water. When water is drunk before meal it helps in reducing weight. Where as, when water is drunk in the middle of the meal, it helps in maintaining the weight and normal body posture. But, When Water is drunk after the meal, it leads to weight gain.

20) Routinely having Luke warm water helps in reducing and controlling weight gain.

21) Appropriate oral intake along with physical exercise i.e. cycling, swimming, outdoor games etc. along with following *Dincharya and Rutucharya* helps in preventing hazards of childhood obesity.

22) **Do's and Don't's :-**

Do's :-

3. Physical activity like cycling, swimming, outdoor games etc

4. Above mentioned preparation, Milk, Ghee, Jawar, Bajara, Nachani, MoongKhichadi, Buttermilk, Sita, Soups, Brinjal, Daliya, Have water before lunch and dinner, Lukewarm water.

Don't's:-

3. Indoor games, sedentary lifestyle.

4. Junk food, over eating, paneer, cheese, chilled beverages, Jaggery, sugar, fermented food items, milk products, excessive water, water after lunch and dinner, wheat, Maida, sabudana, etc.

DISCUSSION:-

Hormones also play an important role in obesity. For treating childhood obesity, one must rule out the hormonal imbalance, genetic disorders etc. Management of childhood obesity is done by treating *Agnidushti, Strotorodh* of *Medadhathu* and by subsiding the vitiated *vata* and *kaphadosha*, Where as the prevention of childhood obesity can be done by following seasonal regimens, daily regimens, proper dietary habits and proper change in lifestyle as mentioned

above and also by taking internal medications along with panchkarma therapies. Panchkarma therapies play important role in reducing weight and also help in controlling weight gain .

CONCLUSION :-

Obesity is the non-communicable disease. Making healthier choice of diet and changes in lifestyle not only help in controlling weight gain but also help in increasing metabolism. Thus, *Ayurvedic* management helps in controlling the weight and reducing the incidence rate of childhood obesity.

Children being the future of nation. Management and prevention of childhood obesity is the need of an hour.

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ASSESSMENT OF MANSA SARATA BY AYURVEDPARAMETERS

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Abstract

Ayurved context given emphasis on Sarata. In the Dashvidha pariksha of Ayurved it has been stated that Saar pariksha is one of the important investigation. Therefore, it can be said that the person who has got a good sarata is bound, have good 'Vyadhikshamatva'. The dhatu sarata examination is mainly based on Darshan (Inspection), Sparshana (Palpation & Percussion) and Prashna (Interrogation or history taking) parikshana. But most of the part mentioned in Ayurvedic context is of subjective type, so it is necessary to search for any objective type of parameter. Ayurved has specifically explained the Dhatu Sarata concept for understanding the quantitative and qualitative status of strength of the body. Charak has clearly mentioned that the Bala of patient should be critically analyzed on the parameter of Sarata. In the feature of Sarata of each tissue (Dhatu) there is the specific reference of 'Bala' has been mentioned with regards to Mansa, Majja and Shukra dhatu. Now a days, physical fitness is very important & its important to study various parameters in Ayurved. The practical applicability of this study will be the availability of objective parameter in Mansa sarata examination. Evaluation of Mansa sarata of patient is very important for the determination of prognosis of the disease and dose of the drugs.



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INTRODUCTION

Ayurveda and Ancient system of medicine gives emphasis on Sarata. In the Dashvidha pariksha of Ayurveda it has been stated that Saar pariksha is one of the important investigation i.e. the investigation for the strength. The definition of Sarata is

विशुद्धतरो धातुः सरोच्यते ।^१

– चक्र. च. वि. ८/१०२

Therefore, it can be said that the person who has got a good sarata is bound to have good 'Vyadhikshamatva'. The dhatu sarata examination is mainly based on Darshan (Inspection), Sparshana (Palpation & Percussion) and Prashna (Interrogation or history taking) parikshana. But most of the part mentioned in Ayurvedic context is of subjective type, so it is necessary to search for any objective type of parameter.

इति साराण्यष्टौ पुरुषाणां बलप्रमाणविशेषज्ञानार्थमुपदिष्टानि भवन्ति ॥^२

– च. वि. ८/११४.

Ayurved has specifically explained the Dhatu Sarata concept for understanding the quantitative and qualitative status of strength of the body. Charak has clearly mentioned that the Bala of patient should be critically analyzed on the parameter of Sarata. It should not be only on the physical. Each individual should be examined properly, at the level of Dhatu Sarata. In feature of Sarata of each tissue (Dhatu), there is specific reference of 'Bala' has been mentioned with regard to Mansa, Majja and Shukra dhatu.

Now a days, Physical fitness is very important. Hence, it is important to study various parameters in Ayurveda. The practical applicability of this study will be the availability of objective parameter in Mansa sarata examination. Evaluation of Mansa Sarata of patient is very important for the determination of prognosis of disease and dose of drugs.

Ayurvedic review

Charak Acharya mentioned examination of sarata in Dashavidha parikshana. It is the only clinical method of investigation by which state of the dhatu and functioning capacity of the dhatu can be understood. Sarata is described in order to assess bala i. e. strength of an individual. Examination of saratva indicates bala of an individual.

तस्मात्- आतुरं परीक्षेत प्रकृतिः-च, विकृतिः-च, सारतः-च, संहननतः-च, प्रमाणतः-च, सात्म्यतः-च, सत्त्वतः-च, आहारशक्तिः-च, व्ययामशक्तिः-च, वयस्तः-च-इति, बलप्रमाणविशेषग्रहणहेतोः
।^१च.वि.८/९४.

Patient should be examined so as to obtain knowledge regarding the degree of strength as –

- 1) Prakruti 6) Satmya
- 2) Vikruti 7) Sattva
- 3) Sara 8) Aaharshakti
- 4) Samhanana 9) Vyayamshakti
- 5) Pramana 10) Vaya

Sarata Explanation

Meanings of Sarata are essential most excellent, best, real, genuine, true, strong .

बलम् ।^१ –(च.वि.८/९६)

सारशब्देन विशुद्धतरो धातुः-उच्यते ।^१ –(च.वि. ८/१०२ चक्रपाणी)

उत्कृष्टधातुत्वमुत्कृष्टधातुर्वा ।^२ –(सु.सू. ३५/१६)

अन्तर्गतः प्रधानभूतोऽवयवः ।^३ –(सु.सू. ४५/१२३)

स्थिरांशः कठिनो भागः ।^४ –(सु.शा. ५/२१)

अन्तर्भागः ।^५ –(सु. क.७/३७)

उपरितनः स्निग्धो भागः ।^६ –(सु.उ.४०/१४५)

सारो बले स्थिरांशे च ।^७ –(अमरकोष)

From all above references we can define Sara as : the supremequality of dhatu and superb functional aspect is called as Sara.

Description Of Sarata According To Different Samhitas -

तद्यथा त्वग्रक्तमांसमेदोऽस्थिमज्जाशुक्रसत्वानीति ।^१–(च.वि. ८/१०२)

अथः सारान् वक्ष्यामः प्रधानमायुः सौभाग्ययोरिति ।^२–(सु.सू. ३५/१८)

सारण्यष्टौ त्वग्रक्तमांसमेदोऽस्थिमज्जाशुक्रसत्वानीति ।^३–(अ.सं.शा. ८/२९)

त्वग्रक्तादीनिसत्वान्तान्यग्राण्यष्टौ यथोत्तरम् ।^४–(अ.हृ.शा. ३/११७)

ओजः सत्त्वं च सर्वं च तत्सारं तु निबोध ।^५–(का.सू. २८)

Mansa Sarata Ayurved Reveiw -

1] Charaka Samhita

ग) तस्य परीक्षा आयुषः प्रमाणं ज्ञान हेतुः वा स्यात्, बल दोष प्रमाणं ज्ञान हेतुः वा ।^१–च. वि. ८/९३

Examination of the patient is conducted for the knowledge of thespan of life or for the degree of strength and morbidity.

Chakrapani-

बलस्य दोषस्य च प्रमाणं बलदोष प्रमाणम् ।^२

घ) तस्मात् आतुरं परीक्षेत प्रकृतितः च, विकृतितः च, सारतः च, संहननतः च , प्रमाणतः च,

सात्म्यतः च, सत्वतः च, आहार शक्तितः च, व्यायाम शक्तितः च, वयतः च इति बलप्रमाण विशेष ग्रहणहेतोः

॥^३

– च. वि. ८/९४

Hence the patient should be examined in respect of Prakruti(constitution), Vikruti (Morbidity), Sara (constitution of dhatu),Samhanana (compactness), Pramana (measurement), Satmya

(suitability), Sattwa (psyche), Aaharasakti (power of intake and digestion of food), Vyayamashakti (power of exercise) and age for theknowledge of the degree of strength.

च) सारतः च इति साराणि अष्टौ पुरुणां बल मान विशेष ज्ञानार्थम् उपदिश्यन्ते,

तत् यथा त्वक्दृ रक्तं- मांसदृ मेददृ अस्थि- मज्जा- शुक्र- सत्वानि इति ।^१

च. वि. ८/१०२

A patient should now be examined in respect of Sara(constitutional essence).There are eight types of Sara in human beings which aredescribed here for the knowledge of the degree of strength such as thetypes of Sara relating to each of Twak, Rakta, Mansa, Medas, Asthi,Majja, Sukra and Satwa.

Chakrapani-

सारतः च इति आदौ सारशब्देन विशुद्धतरो धातुः उच्यते ।^१

छ)शङ्ख ललाट कृकाटिका अक्षिगण्ड हनु ग्रीवा स्कन्ध उदर कक्ष वक्षः पाणि पादः सन्धयः ।

स्थिर गुरु शुभमांसोपचिता मांससाराणाम् ।सा सारता क्षमां धृतिमलौल्यं वित्तं विद्यां सुखमार्जवमारोग्यं बलमायुरुचदीर्घमाचष्टे ॥^१

-च.वि. ८/१०५

The person with essence of Mansa have their temples, forehead,nape, eyes, cheek, jaws, neck, shoulders, abdomen, axillae, chest,hands, feet and joints equipped with firm, heavy and good lookingmuscles.This essence indicates for bearance, restraint, lack of greed,wealth, learning, happiness, simplicity, health, strength and longevity.

Chakrapani –

उपचितत्वात् इति स्थूलत्वात् ।^१

2] Sushrut Samhita –

ग) अथ सारान् वक्ष्यामः – स्मृति भक्ति -----

अच्छिद्रगात्रं गूढ-अस्थि-संधिम् मांस-उपचितं च मांसेन ।^१ – सु.सू.३५/१६

The body is without any depression (body is well covered by compact muscle tissue), the bony joints are concealed and muscles are well developed.

Dalhanacharya –

सारेण अपि आयुः निर्देशन आह दृ अथ इति आदि ।^{१०}

मांसोपचितम् इति मांसल शरीरम् इति अर्थः ।^{१०}

मांसेन इति मांसेन कृत्वा सारं विद्यात् इति संबन्धः ।^{१०}

3] Asthang Hrudaya –

ग) त्वक् दृक्-आदिनि सत्त्वान्-तानि-अग्रथाणि-अष्टौ यथा-उत्तरम् ।

बलप्रमाणज्ञानार्थं साराणि-युक्तानि देहिनाम् ॥

सारे-उपेतः सर्वैः स्यात्परं गौरव-संयुतः ।

सर्व-आरंभेषु च-आशावान्-सहिष्णुः सन्मतिः स्थिरः ।^{१०}

-अ.ह.शा.३/११८.

Eight kinds of sara commencing with (that of) twak, and rakta and ending with (that of) satva, each succeeding one better than itspreceeding, have been enumerated for determining the quantity of strength of the body. The person endowed with all the Sara is sure to earn great respect, hopeful of success in all this activities, capable of with standing troubles, will be wise and steady.

4] Astanga Samgaraha –

ग) तथा साराणिः-अष्टौ त्वग्-रक्त-मांसं-मेद-अस्थि-मज्जा-शुक्र-सत्त्वात्मकानि-उत्तरोत्तर वराणि बलमानज्ञानार्थम् - उपदिश्यन्ते । अपि च । न मुह्येत् देह मात्र दर्शनात् एव भिषगयम् उपचयेन महाशरीरत्वात् वा बलवानयं कृ शत्वात् अल्पशरीरत्वात् अल्पबल इति तत् च उभयम् अपि अन्यथा दृष्टं गजसिंहे ।^{१०}

- अ. सं. शा. ८/२७

Sara (excellence, perfectness, strength) is described as of eight kinds in relation to skin, blood, muscles, fat, bone marrow, semen and mind; each succeeding one, better than its preceeding and helpful in determining the degree of strength; further, the physician should not commit the mistakes of deciding any person as strong or weak by merely looking at the good hefty build

or weak thin build of the body respectively as both of them might be otherwise, as (seen) in the case of the elephant and the lion.

घ) तत्र सर्वैः सारै रूपेतो भवति अतिबलः, परमगौरव युक्तः, क्लेशक्षमः सर्व आरम्भेषु आत्मनि, प्रत्याशावान् कल्याणाभिनिवेशी स्थिर शरीरः, सुसमहितगतिः, सअनुनाद- स्निग्ध- गम्भीर- महास्वरः, सुख दृ ए र्य-वित्त दृ उपभोग दृ सन्मान दृ भाजः- मन्द दृ जरामयः प्रायः तुल्य गुण विस्तीर्ण अपत्यो, दीर्घ आयुशः च । तत् विपरीतस्तु असारः। मध्यो मध्य गुणः॥^८-अ. सं. शा. ८/२८

The person who is endowed with all types of excellences, will very stronge, with very stable physique, capable of with standing strain, having full self confidence in the result of all his activities, benoalent in all his deeds, possesses a stronge body, balanced gait, has vibrating, polite, dignified and loud voice, enjoys, happiness, wealth, money, luxuries, and respect (from all); old age and disease approach him slowly; is endowed with many children of similar qualities and enjoys long life. The opposite of these qualities are the features of a person of poor strength, and the possessor of medium qualities of medium strength.

Mansa Sarata Means –

1. Proper structure (Swarup & Sanghatan) of Mansa dhatu .
2. Normal quantity of Mansa dhatu.
3. Normal qualities of Mansa dhatu .
4. Normal functions of Mansa dhatu .

Let us have a look on above aspects with textual reference

.1. Structure (Swarup & Sanghatan) of Mansa dhatu :

शरीरस्य पुष्टिकर : अवयवाच्छादक पेशीस्त्रायवादि रूपेण संधिबंधाकुंचनप्रसारणादिकर : धातु मांसं नाम पिशितं पललं क्रव्यम् आमिषमिति मांसस्य पर्याया : ।^९

(अमरकोष कां १.६.६५)

Mansa dhatu make a person hefty, covers all his organs invarious presentations like vessels, tendons, ligaments etc. and functions for contraction and relaxation. Synonyms for this Dhatu are Pisita, Kravyam, Amisa etc. which really means mater that can be eaten.

Utpatti of Mansa Dhatu :

Composition and structure of Mansa dhatu.

वायवम्बुतेजसा रक्तमूष्मणा चाभिसंयुतम् ।

स्थिरतां प्राप्य मांसं स्यात्स्वोष्मणा पक्वमेव तत् ।^१

(च. चि. १५/२८)

Raktadhatu is fluid. Excel part of this fluid, which reaches Mansavahasrotas and is acted upon by Mansa dhatwagni along with Vayu, Jala and Teja to stabilize fluid Raktadhatu into solid Mansa Dhatu.

Panchabhautic predominance of Mansa Dhatu :

तत्र पंचभूतात्मकत्वेन, रसः आप्यः, रक्तं तेजोजलात्मकम् ततेजोजलात्मकम्,
मांस पार्थिवं,.....^२

-सु.सू. ५/८ (भानुमती टीका)

Pancabhautic structure of Mansa Dhatu is predominant inpruthvi.

मांसवहानां स्रोतसाम् स्नायू मुलम् त्वक् च ।^१

च.वि.५/१०

Principle organs of Mansavaha srotas are 'Snayu' and 'Twak'.

2. Normal quantity of Mansa dhatu

दोष धातु मलानां परिमाणं न विद्यते ।^२

-सु.सू.१५/१७

There is no specific quantity can be explain regarding DoshDhatu & Mala.The quantity of Mansa Dahtu varies as per the prakruti orSarata of Mansa Dhatu.

Normal qualities of Mansa dhatu -

नातिशीत गुरु स्निग्धं मांसमाजमदोषलम् ।

शरीर धातु सामान्यादनभिष्यंदि बृहणम् ॥^१

-च. सू. २७/५९

मांसावयवसंघातः परस्परं विभक्तः पेशी इत्युच्यते ।^४ -सु. शा. ५/३७

Mansa dhatu's Propertieslike not very cool, not very heavy and not very unctuous are read ofMansa dhatu. Parts of Mansa dhatu is separated by Pesi.

4. Normal functions of Mansa dhatu -

मांस धातु कर्म दृ लेपः (श्रेष्ठं कर्म)^९ -अ.ह.सू.११/४

Principle function of Mansa Dhatu is covering.

सिरास्नायवस्थिमर्माणि संधयश्च शरीरिणाम्।

पेशीभिः संवृतान्यत्र बलवन्ति भवन्त्यतः॥४

सु.शा ५/३७

Peshi is supposed to be part and parcel of Mansa DhatuUpadhatu - Sira, Snayu, Dhatu-Asthi, various joints and Marma of body are packed well with Pesi and are therefore fit and strong.

मांसान्यत्र निबद्धानि सिराभिः स्नायुभिस्तथा ।

अस्थीन्यालंबनं कृत्वा न शीर्यते पतन्ति वा ॥४

–सु.शा.५/२३

Mansa is principle binder of Sira, Snayu etc and helps Asthidhatu for maintaining the body posture. It is therefore that strength of body is sustained and it stands uprights.

मांसपेश्योबलायस्यरवष्टंभाय देहिनाम् ।

प्रसारणाकुंचनयोरंगानां कंडरा मताः ॥४

– सु.शा ५/३८

Mansapesi gives strength and is meant for non-displacement of soft tissue. Tissue which contracts and relaxes is called Kandara.

देहलेपमलमेदःपुष्टिभिः मांसम् ।८

–अ.सं.सू.१९

Normal functions of Mansa Dhatu are to provide covering or packing to all needful body entities, to help to excrete internal mala to outside to cavities and to nourish Medodhatu.

Mansa sara Purush Laksan:

शङ्खललाटकृकाटिकाक्षिगण्डहनुग्रीवास्कन्धोदरकक्षवक्षःपाणिपादसन्धयः स्थिरगुरुशुभमांसोपचिता

मांससारणाम् ।सा सारता क्षमां धृतिमलौल्यं वित्तं विद्यां सुखमार्जवमारोग्यं बलमायुश्चदीर्घमाचष्टे॥१ –च.वि.

८/१०५

अच्छिद्रगात्रं गुढास्थिसंधि मांसोपचितश्च मांसेन ।२

–सु.सू. ३५/१८

Physical Characteristics :-

These individuals are characterized by stability, heaviness, beautiful appearance and plumpness of temples, forehead, nape, eyes, cheeks, jaws, neck, shoulder, abdomen, axillae.

Chest and joints of upper and lower limbs being covered with Mansa.

Physio – psychological Characteristics :-

They are endowed with forgiveness, patience, non – greediness,wealth, knowledge, happiness, simplicity, health, strength andlongevity.

MANSA SARATA EXAMINATION -

ललाटकृकाटिकाक्षिगण्डहनुग्रीवास्कन्धोदरकक्षवक्षःपाणिपादसन्धयः स्थिरगुरुशुभमांसोपचिता मांससाराणाम्
सा सारता क्षमां धृतिमलौल्यं वित्तं विद्यां सुखमार्जवमारोग्यं बलमायुश्चदीर्घमाचष्टे॥१

-च.वि. ८/१०५

Observational parameters of Mansa-sarata.

Sr.no.	Sharir Lakshyana Body parts	Observation Mamsopachit (Well covered with Muscles)		
		Yes,well covered (Uttam Sarata) (A)	Yes,Moderately Covered (Madhyam sarata) (B)	No,Not Covered (Hin Sarata) (C)
1	Shankha (temporal-Region)			
2	Lalata (forehead)			
3	Krukatika (Nape)			
4	Akshiganda (eyes Socket)			
5	Hanu (chin-jaws)			
6	Griva (Neck)			
7	Skanda (Shoulders)			
8	Udara (Abdomen)			
9	Kaksha (Axilla)			
10	Vaksha (Chest)			
11	Pani (Hands)			

12	Pada (feet)			
13	Sandhi (joints)			

Scoring of observational parameters (Mark the appropriate answer √)

14) Whether the person has having a habit of moving shoulders, neck etc. unnecessary (tics) ? (ÎxjÉU)

- a) No, Never
- b) Yes, Some time
- c) Yes, always.

15) Whether your extremities are well covered with muscles? (qÉÉÇxÉÉâmÉÍcÉiÉ)

- a) Yes
- b) Yes, Moderately Covered
- c) Bony, body (Muscle coating is very less)

16) Whether your body is muscular due to regular exercise ?

(rÉÑÌfÿM×üiÉ - qÉÉÇxÉsÉâmÉÍÉ)

- a) No, not due to only exercise, present naturally
- b) Yes, body is muscular due to regular exercise, yuktikrut Mansa lepan(coating)
- c) Body can not become muscular even after doing exercise
- d) Not applicable

17) If you left the exercise then also your body remain muscular?

(qÉÉÇxÉxÉÉUíÉÉ)

- a) Yes
- b) Yes, can remain sturdy & muscular for some duration
- c) No
- d) Not applicable

18) Can you easily forgive others? (æÉqÉÉ)

- a) Yes, always
- b) Yes, Some times
- c) No, Never

19) Do you have good courage? (kÉ×ÏiÉ)

- a) Yes, always

b) Yes, Some times

c) No, Never

20) Are you greedy for the materialistic gain? (AsÉÉæsÉ)

a) No, Never

b) Yes, Some times

c) Yes, always

21) Whether you are healthy and need help from doctor occasionally?(AÉUÉåarÉ)

a) Yes, always healthy

b) Yes, averagely healthy, needs doctor some time

c) No, needs doctor frequently

22) How is your physical strength? (oÉsÉ)

a) Very good, do hard work always

b) Ok, can tolerate hard work moderately, some times problems after too much hard work.

c) Poor, can not tolerate physical hard work.

• **Mansa-sarata percentage:-**

SCORE OUT OF 22POINTS IN PERSENTAGE -

Good(A) - %

Moderate(B) -%

Poor(C)- %

Volunteers were randomly selected. Consent of each candidate had taken. Mansa-sarata examination of each candidate done as per prescribed proforma.

Proforma is attached in the Annexure. The proforma includes general information about the volunteers that is name, age, sex, address, religion, occupation, economical status, height, weight, diet,and clinical examination of Mansa-sarata.

Case Paper Proforma

Department of Sharir Kriya (Post Graduate)

Case Paper Proforma

Title of Study- “Assesment of Mansa Sarata by Ayurved parameters’

Serial No. :

Name :

Address :

Age :

Sex :

Religion :

Occupation :

Economical Status :

Height :

Weight :

Diet :

Mansa Sarata : Uttam [A] Madhyama [B] Heena [C]

Mansa-Sarata Examination

Sr. No.	Sharir Lakshyana (Body Parts)	Observation Mamsopachit(Well covered with Muscles)		
		Yes, well covered (Uttam Sarata) A	Yes, Moderately Co vered (Madhyam sarata) B	No, Not Covered (HeenaSarata) C
1	Shankha (temporal Region)			
2	Lalata(forehead)			
3	Krukatika (Nape)			
4	Akshiganda (eyes Socket)			
5	Hanu(chin-jaws)			
6	Griva (Neck)			

7	Skanda (Shoulders)			
8	Udara (Abdomen)			
9	Kaksha (Axilla)			
10	Vaksha (Chest)			
11	Pani (Hands)			
12	Pada (feet)			
13	Sandhi (joints)			

14) Whether the person has having a habit of moving shoulders, neck etc. unnecessary (tics) ? (ÎxjÉU)

- a) No, Never
- b) Yes, Some time
- c) Yes, always

15) Whether your extremities are well covered with muscles? (मांसोपचित)

- a) Yes
- b) Yes, Moderately Covered
- c) Bony, body (Muscle coating is very less)

16) Whether your body is muscular due to regular exercise?

(युक्तिकृत मांसलेपन)

- a) No, not due to only exercise, present naturally
- b) Yes, body is muscular due to regular exercise, yuktikrut

Mansa lepan (coating)

- c) Body can not become muscular even after doing exercise
- d) Not applicable

17) If you left the exercise then also your body remain muscular? (qÉÉÇxÉxÉÉUiÉÉ)

- a) Yes
- b) Yes, can remain sturdy & muscular for some duration
- c) No
- d) Not applicable.

18) Can you easily forgive others? (ःÉqÉÉ)

- a) Yes, always
- b) Yes, Some times

c) No, Never

19) Do you have good courage? (kÉ×ÌiÉ)

a) Yes, always

b) Yes, Some times

c) No, Never

20) Are you greedy for the materialistic gain? (AsÉÉæsÉÇ)

a) No, Never

b) Yes, Some times

c) Yes, always

21) Whether you are healthy and need help from doctor occasionally? (AÉUÉåarÉ)

a) Yes, always healthy

b) Yes, averagely healthy, needs doctor some time

c) No, needs doctor frequently

22) How is your physical strength? (oÉsÉ)

a) Very good, do hard work always

b) Ok, can tolerate hard work moderately, some times problems after too much hard work.

c) Poor, can not tolerate physical hard work.

Score (out of 22) :- Option A % -

Option B % -

Option C % -

Mansa Sarata Percentage :-More % of option A/ B /C.

Mansa Sarata :- Uttam(A)/ Madhyam (B)/ Heena (C) .

Conclusion –

Above results gives the information about distribution of volunteers according to Mansa Sarata. Also can be conclude each individual's Mansa sarata, which is divided into **Uttam (good) - A option , Madhyam (Moderate)- B and Heena (poor)– C.** Above study conclude individual is Good Mansa sarata – more % of Option A , Moderate sarata - more % of Option B, Poor Sarata - more % Option C have . Also, from this table it is clear about Mansa Sarata was better in which gender.

Result noted.

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AN AYURVEDIC REVIEW OF VANDHYATVA

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Abstract

Women are considered as one of the most essential factor for continuity of life. According to definition of woman or "Stri" - i.e. one who lodges a Garbha or fetus is known as Stri. Acharya Charaka said that woman is the origin of progeny. She is called mother only when she gives birth to a

child. To attain the motherhood is the aim of every woman in this world. (childlessness) is called Vandhyatva. Infertility has been one of the yet unsolved major complaints of womanhood. The system of modern medicine has discovered many of its etiological factors and provide measures for its management. The school of Ayurveda mentions a few principles about vandhyatva and describes some measures to combat the same. As the subject matter discussed in Ayurveda, it becomes necessary to study, understand and prove them particularly in light of modern scientific parameters in the present era. So the field of research in the vandhyatva opens a broad scope for a worker. This topic based on an ayurvedic view of vandhyatva or infertility.



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INTRODUCTION: –

Discription of Vandhyatva is found only in Harita Samhita. But in Harita Samhita also, he has given classification only, no specific etiology or pathogenesis was explained. Other Acharyas has not considered vandhyatva as a independent disease, rather, a cardinal feature of so many diseases. Apart from this they have not used word Vandhyatva, but it is the only symptom i.e. failure to achieve pregnancy, has been referred under various conditions like coitus with old, young or diseased woman .Coitus in abnormal posture, woman having diseased yoni or abnormality of Artava etc. In Kasyapa Samhita (K.Sa. Jati 3), mentioned that, the couple having number of children with proper growth and development due to effect of nature (Savbhavat) or their own deads (Svakarmaparinamat) are fortunate, otherwise, should be treated, i.e. it will be a disease condition which needs Chikitsa.

Vandhyatva may be defined as the inability of a couple to achieve child

NIRUKTI :-

Vandhya :- The woman in whom there is hindrance of any kind to the normal process of conception is called as Vandhya.

SYNONYMS :-

- Vasa - The woman who does not conceive even if she is submissive is called Vasa.
- Avatoka - The woman having missed abortion is called Avatoka.
- Avakesi-The woman who is devoid of Putrasukha and Prasavasukha is called as Avakesi.
- Sravatgarbha - The woman who miscarries frequently is termed as Sravatgarbha.

NIDANA OF VANDHYATVA :-

In classics specific causitive factors of Vandhyatva are not given.

- Acarya Susruta (Sa. 2/33) equating germination of seed with achievement of Conception quoted that if Rutu , bija (ovum and sperms), Kshetra (female reproductive system) and Ambu (nurishment) assemble together the conception will definitely occurs.
- Acharya Charaka (Sa. 8/17) quoted that when both male and female after observing the advocated dietetic regimen and other mode of life and perform coitus and ejaculated unvitiated. Sukra, passing through healthy Yoni, reaches healthy Garbhasaya and gets mixed with disease free Sonita, then conception is definite.
- Vagbhata I (A.S. 1/68) has given importance to Ksetra and Bija while Vagbhata II (A.H. 1/89) has emphasize that besides healthy Garbhashaya, Marga, Rakta (ovum), Sukra, properly functioning Vayu and normal psychological status (happy mood) are also essential.

Summarizing the above description it can be said that for achievement of conception -

- Healthy and properly functioning female reproductive system (Yoni).(Yoni includes ovary, fallopian tubes, uterus, cervix, vagina).
- Healthy sperms and ovum
- Proper functioning Vayu
- Normal psychology
- Healthy partners
- Proper nursing factor
- Proper coitus are necessary

SAMPRAPTI :-

Due to Nidana Sevana, Dosa and Agni get vitiated. Mandagni is the main cause of Ama formation. The Ama formed executes hazardous effects, it adheres to Srotasa and forms Avarodhatmaka Dusti. Ama spreads throughout the body, propelled by the vitiated Vata along the Rasavaha Srotasa and in modernphysiology, a variety of transforming and transmitting substances present in the body like enzymes, hormones, catalysis etc. when these are unable to function properly entirely

different metabolites are formed which the body is not acquainted to process. These accumulated in the body in different systems affecting the normal mechanism of that

particular system. These may be formed as Ama. Due to hypofunctioning of Jatharagni, Dhatvagni Mandya also occurs. Due to Mandagni and Nidanasevana, Rasa, Rakta Dhatu get vitiated. Also the Dhatvagnimandya causes the Ksayatmaka effect on the Artava i.e. the production of Artava .Thus it is the Upadhatvatmaka dusti .

Chikitsa of Vandhyatva :-

- **Samanya Chikitsa** :- Samanya Cikitsa means general management of Yoniroga which includes Sodana and Samana Cikitsa.
- **Visesha Chikitsa** :-Visesa Cikitsa includes Uttarabasti as the best treatment for Yoniroga and Artavadusti.

(A) shaman Chikitsa:-

1. The therapeutic measures mentioned for Pradara Raktatisara, Sonitapitta, Raktarsa, also can be adopted for Yoniroga Cikitsa (Ca. Ci. 30/327, 328).
2. The line of treatment described for Sukra Dosa, Artavadosa, Stanya Roga, Klaibya, Mudhagarbha, Garbhiniroga, Apprajata roga,can be adopted for Artavadusti Cikitsa (Su. U. 38/37, 32).
3. Rasayana and Vajikarana drugs are also useful (Su. Sa. 2/12)
4. Sukradosahara herbs may also be useful (Su. Sa. 2/12)
5. Kshira only or medicated with Jivaniya drugs is useful for treatment (K.S. Si.)
6. The drugs, Anna. i.e. Saliyava, Madya, Mansa and Pittalam may useful. [Su. Su. 15/10]
7. 'Mutradosapratishedhokta" drugs can use in Yoniroga (Su. Su. 2/12)

(B) Sodhana Chikitsa :-

1. 'Yoniroga' 'Yoni Sukrasaya roga' are mentioned as Virecana Sadhya diseases (Su. Ci. 33/32, A.H. Su. 18/9).
2. Niruhabasti was advocated for many diseases one of them is "Rajonash" (A.H.Su. 19/2). Niruha and Anuvasana basti can be given for "Yonisula" and "Sukra Artava ,Stanyanasa ,Niruha Basti works as a nector for woman.
3. Snehana, Svadana, Vamana, Virecana,Niruha, Anuvasana and specially Uttarabasti are to be employed in the treatment of Artava dusti (A.H. Sa. 2/12).
4. For Yoniroga patient should be treated with Kalka, Picu, Achamana (Yoniprakasalana), Abhyanga, Pariseka, Pralepa etc. (Su. Sa. 21/2), (B.P. Ci. 7/35).

Vishesh chikitsa :-

Uttar basti is the vishesh chikitsa for vandhyatva.

The prime role of Vata in Yoniroga (disorders of reproductive system) and

Vandhyatva is stressed / mentioned by all Acharyas. The line of treatment should be start with Vata Samana. "Basti is the best treatment "Basti Vataharanam" (Ca. Su. 25/40) also Vagbhata quoted "Upakramanam Sarvesam Soagrani" (A.H. Su. 19/1). Basti is the first treatment for Vata Pradhana other dosa or Vata dosa only also Hitakara for Pitta, Kapha, Rakta, Sansarga and Sannipata pradhana diseases In all Pancakarma therapy Basti is Pradhana due to its different actions and Nanavidha Dravya Samyoga. Among the three types of Basti, Uttarabasti has some special quality due to which it is nominated as "Uttara:" i.e. "Srestha". Uttarabasti is the main line of treatment in Yoniroga and Mutrasaya Roga. In Artavadusti, specially the Uttarabasti plays main role. Drugs like phala ghrita ,Ashwagandha ghrita ,kalyanak ghrita etc drugs are used for uttarbasti

PATHYA :-

- coitus during Rtukala is beneficial (H.S. Tru. Stha. 48).
- Thce coitus should be done only with the Kamana of Apatya.
- Milk is beneficial ,use of milk helps in achievement of pregnancy. (K.S.Khil. 22)
- Meat increases Artava, gives nurishment and helps in getting pregnancy (K.S. Khil. 24/6).
- Lasuna is also Pathya for infertile woman.

SADHYA - ASADHYATA:-

It depends upon the specific causes of Vandhyatva, i.e. the Vandhya described by

Charaka as a congenital disease is incurable. Harita explains that first

five types of Vandhya are curable. Infertile woman, who has coitus before her menarcho gets cured with difficulty. Anapatya gets cured with treatment. Vandhyatva due to loss of Dhatu is also curable. Vandhyatva caused due to anovulation is Krcchasadhya.

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CERVICAL CANCER – A SHORT VIEW

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Abstract

There is wide range of geographical variation in the incidence of major genital malignancies, the reason is far from clear. In USA(1985), cancer of the breast, ovary and uterus accounts for 51 per cent of all cancers among females. These sites accounted for 28 per cent of all deaths caused by cancer. In the most developing countries carcinoma of the breast and cervix are leading sites of malignancies in females and are major public health problems. In India ,twelve population based cancer registries showed cancer breast was the most common followed by cancer of the cervix. Amongst female cancers, relative proportion of cancer breast varied between 21 and 24 per cent whereas that of cancer cervix was between 14 and 24 per cent. Major factors affecting the

prevalence of carcinoma cervix in a population are economic factor, sexual behaviour and degree of effective mass screening.



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What is cancer?

Cancer begins when cells in a part of the body start to grow out of control. There are many kinds of cancer, but they all start because of out-of-control growth of abnormal cells.

Cancer cell growth is different from normal cell growth. Instead of dying, cancer cells continue to grow and form new, abnormal cells. Cancer cells can also invade (grow into) other tissues, something that normal cells cannot do. Growing out of control and invading other tissues are what makes a cell a cancer cell.

Cells become cancer cells because of damage to DNA. DNA is in every cell and directs all its actions. In a normal cell, when DNA gets damaged the cell either repairs the damage or the cell dies. In cancer cells, the damaged DNA is not repaired, but the cell doesn't die like it should. Instead, this cell goes on making new cells that the body does not need. These new cells will all have the same damaged DNA as the first cell does.

People can inherit damaged DNA, but most DNA damage is caused by mistakes that happen while the normal cell is reproducing or by something in our environment. Sometimes the cause of the DNA damage is something obvious, like cigarette smoking. But often no clear cause is found.

In most cases the cancer cells form a tumor. Some cancers, like leukemia, rarely form tumors. Instead, these cancer cells involve the blood and blood-forming organs and circulate through other tissues where they grow.

Cancer cells often travel to other parts of the body, where they begin to grow and form new tumors that replace normal tissue. This process is called metastasis. It happens when the cancer cells get into the bloodstream or lymph vessels of our body.

Not all tumors are cancerous. Tumors that aren't cancer are called benign. Benign tumors can cause problems – they can grow very large and press on healthy organs and tissues. But they cannot grow into (invade) other tissues. Because they can't invade, they also can't spread to other parts of the body (metastasize). These tumors are almost never life threatening.

Symptoms

Early cervical cancers usually don't cause symptoms. When the cancer grows larger, women may notice abnormal [vaginal bleeding](#):

- Bleeding that occurs between regular menstrual periods
- Bleeding after sexual intercourse, [douching](#), or a [pelvic exam](#)
- Menstrual periods that last longer and are heavier than before
- Bleeding after going through [menopause](#)

Women may also notice...

- Increased [vaginal discharge](#)
- Pelvic pain
- Pain during sex

Cervical cancer, infections, or other health problems may cause these symptoms. A woman with any of these symptoms should tell her doctor so that problems can be diagnosed and treated as early as possible.

What are the risk factors for cervical cancer?

A risk factor is anything that changes your chance of getting a disease such as cancer. Different cancers have different risk factors. For example, exposing skin to strong sunlight is a risk factor for skin cancer. Smoking is a risk factor for many cancers. But having a risk factor, or even several, does not mean that you will get the disease.

Cervical cancer risk factors include:

Human papilloma virus infection

The most important risk factor for cervical cancer is infection by the human papilloma virus (HPV). HPV is a group of more than 100 related viruses, some of which cause a type of growth called a *papilloma*, which are more commonly known as *warts*.

HPV can infect cells on the surface of the skin, and those lining the genitals, anus, mouth and throat, but not the blood or internal organs such as the heart or lungs.

HPV can be passed from one person to another during skin-to-skin contact. One way HPV is spread is through sex, including vaginal and anal intercourse and even oral sex.

Different types of HPVs cause warts on different parts of the body. Some cause common warts on the hands and feet; others tend to cause warts on the lips or tongue.

Infection with HPV is common, and in most people the body can clear the infection by itself. Sometimes, however, the infection does not go away and becomes chronic. Chronic infection,

especially when it is caused by certain high-risk HPV types, can eventually cause certain cancers, such as cervical cancer.

The Pap test looks for changes in cervical cells caused by HPV infection. Other tests look for the infections themselves by finding genes (DNA) from HPV in the cells. Some women are tested for HPV along with the Pap test as a part of screening. When a woman has a mildly abnormal Pap test result the HPV test may also be used to help decide what to do next. If the test results show a high-risk type of HPV, it can mean she will need to be fully evaluated with a colposcopy procedure.

Although there is currently no cure for HPV infection, there are ways to treat the warts and abnormal cell growth that HPV causes.

Smoking

When someone smokes, they and those around them are exposed to many cancer-causing chemicals that affect organs other than the lungs. These harmful substances are absorbed through the lungs and carried in the bloodstream throughout the body. Women who smoke are about twice as likely as non-smokers to get cervical cancer. Tobacco by-products have been found in the cervical mucus of women who smoke. Researchers believe that these substances damage the DNA of cervix cells and may contribute to the development of cervical cancer. Smoking also makes the immune system less effective in fighting HPV infections.

Immunosuppression

Human immunodeficiency virus (HIV), the virus that causes AIDS, damages the immune system and puts women at higher risk for HPV infections. This might explain why women with AIDS have an increased risk for cervical cancer. The immune system is important in destroying cancer cells and slowing their growth and spread. In women with HIV, a cervical pre-cancer might develop into an invasive cancer faster than it normally would. Another group of women at risk of cervical cancer are women receiving drugs to suppress their immune response, such as those being treated for an autoimmune disease (in which the immune system sees the body's own tissues as foreign and attacks them, as it would a germ) or those who have had an organ transplant.

Chlamydia infection

Chlamydia is a relatively common kind of bacteria that can infect the reproductive system. It is spread by sexual contact. Chlamydia infection can cause pelvic inflammation, leading to infertility. Some studies have seen a higher risk of cervical cancer in women whose blood test results show evidence of past or current chlamydia infection (compared with women who have normal test results). Women who are infected with chlamydia often have no symptoms. In fact, they may not know that they are infected at all unless they are tested for chlamydia during a pelvic exam.

Diet

Women whose diets don't include enough fruits and vegetables may be at increased risk for cervical cancer. Overweight women are more likely to develop adenocarcinoma of the cervix.

Oral contraceptives (birth control pills)

There is evidence that taking oral contraceptives (OCs) for a long time increases the risk of cancer of the cervix. Research suggests that the risk of cervical cancer goes up the longer a woman takes OCs, but the risk goes back down again after the OCs are stopped. In one study, the risk of cervical cancer was doubled in women who took birth control pills longer than 5 years, but the risk returned to normal 10 years after they were stopped.

Intrauterine device use

A recent study found that women who had ever used an intrauterine device (IUD) had a lower risk of cervical cancer. The effect on risk was seen even in women who had an IUD for less than a year, and the protective effect remained after the IUDs were removed.

Using an IUD might also lower the risk of endometrial (uterine) cancer. However, IUDs do have some risks. A woman interested in using an IUD should first discuss the potential risks and benefits with her doctor. Also, a woman with multiple sexual partners should use condoms to lower her risk of sexually transmitted illnesses no matter what other form of contraception she uses.

Multiple full-term pregnancies

Women who have had 3 or more full-term pregnancies have an increased risk of developing cervical cancer. No one really knows why this is true. One theory is that these women had to have had unprotected intercourse to get pregnant, so they may have had more exposure to

HPV. Also, studies have pointed to hormonal changes during pregnancy as possibly making women more susceptible to HPV infection or cancer growth. Another thought is that pregnant women might have weaker immune systems, allowing for HPV infection and cancer growth.

Young age at the first full-term pregnancy

Women who were younger than 17 years when they had their first full-term pregnancy are almost 2 times more likely to get cervical cancer later in life than women who waited to get pregnant until they were 25 years or older.

Poverty

Poverty is also a risk factor for cervical cancer. Many low-income women do not have ready access to adequate health care services, including Pap tests. This means they may not get screened or treated for cervical pre-cancers.

Diethylstilbestrol (DES)

DES is a hormonal drug that was given to some women to prevent miscarriage between 1940 and 1971. Women whose mothers took DES (when pregnant with them) develop clear-cell adenocarcinoma of the vagina or cervix more often than would normally be expected. This type of cancer is extremely rare in women who haven't been exposed to DES. There is about 1 case of this type of cancer in every 1,000 women whose mothers took DES during pregnancy. This means that about 99.9% of "DES daughters" do not develop these cancers. .

Family history of cervical cancer

Cervical cancer may run in some families. If your mother or sister had cervical cancer, your chances of developing the disease are 2 to 3 times higher than if no one in the family had it. Some researchers suspect that some instances of this familial tendency are caused by an inherited condition that makes some women less able to fight off HPV infection than others. In other instances, women from the same family as a patient already diagnosed could be more likely to have one or more of the other non-genetic risk factors previously described in this section.

Staging

If the biopsy shows that you have cancer, your doctor will need to learn the extent (stage) of the disease to help you choose the best treatment. The stage is based on whether the cancer has invaded nearby tissues or spread to other parts of the body. Cervical cancer spreads most

often to nearby tissues in the pelvis or to lymph nodes. It may also spread to the lungs, liver, or bones.

- **Chest x-ray:** An x-ray of the chest can often show whether cancer has spread to the lungs.
- **CT scan:** An x-ray machine linked to a computer takes a series of detailed pictures of your pelvis, abdomen, or chest. Before a CT scan, you may receive contrast material by injection in your arm or hand, by mouth, or by enema. The contrast material makes abnormal areas easier to see. A tumor in the liver, lungs, or elsewhere in the body can show up on the CT scan.
- **MRI:** A powerful magnet linked to a computer makes detailed pictures of your pelvis and abdomen. Before MRI, you may receive an injection of contrast material. MRI can show whether cancer has invaded tissues near the cervix or has spread from the cervix to tissues in the pelvis or abdomen.

The stage is based on where cancer is found. These are the stages of invasive cervical cancer:

- **Stage I:** Cancer cells are found only in the cervix.
- **Stage II:** The tumor has grown through the cervix and invaded the upper part of the vagina. It may have invaded other nearby tissues but not the pelvic wall (the lining of the part of the body between the hips) or the lower part of the vagina.
- **Stage III:** The tumor has invaded the pelvic wall or the lower part of the vagina. If the tumor is large enough to block one or both of the tubes through which urine passes from the kidneys, lab tests may show that the kidneys aren't working well.
- **Stage IV:** The tumor has invaded the bladder or rectum. Or, the cancer has spread to other parts of the body, such as the lungs.

Diagnosing cervical cancer

If cervical cancer is suspected, you will be referred to a gynaecologist (a specialist in treating conditions of the female reproductive system).

Referral will be recommended if the results of your cervical screening smear test suggest that there are abnormalities in the cells of your cervix. However, in most cases, the abnormalities do not mean that you have cervical cancer.

You may also be referred to a gynaecologist if you have abnormal vaginal bleeding or your GP noticed a growth inside your cervix during an examination.

The sexually transmitted infection (STI), [chlamydia](#), is one of the most common reasons why women experience unusual vaginal bleeding. Your GP may recommend that you are tested for it first before being referred.

[Testing for chlamydia](#) involves taking a small tissue sample from your cervix or carrying out a urine test.

Colposcopy

If you have had an abnormal cervical screening test result, or your symptoms suggest that you may have cervical cancer, your gynaecologist will usually carry out a [colposcopy](#). A colposcopy is an internal vaginal examination to look for any abnormalities in your cervix.

During a colposcopy, a small microscope with a light source at the end (colposcope) is used. As well as examining your cervix, your gynaecologist may remove a small tissue sample ([biopsy](#)) so that it can be checked under a microscope for cancerous cells.

Cone biopsy

If your gynaecologist is unable to see your cervix properly using a colposcope, you may need to have a cone biopsy. This is a minor operation that's carried out in hospital, usually under a [local anaesthetic](#).

During a cone biopsy, a small, cone-shaped section of your cervix will be removed so that it can be examined under a microscope for cancerous cells. You may experience vaginal bleeding for up to four weeks after the procedure. You may also have period-like pains.

Further testing

If the results of the biopsy suggest that you have cervical cancer, and there's a risk that the cancer may have spread, you'll probably need to have some further tests to assess how widespread the cancer is. These tests may include:

- a pelvic examination carried out under general anaesthetic – your womb, vagina, rectum and bladder will be checked for cancer
- [blood tests](#) – which can be used to help assess the state of your liver, kidneys and bone marrow
- [computer tomography \(CT\) scan](#) – scans are taken of the inside of your body and a computer is used to assemble them into a detailed, three-dimensional image; this is useful for showing up cancerous tumours and checking whether the cancerous cells have spread

- [magnetic resonance imaging \(MRI\) scan](#) – this type of scan uses strong magnetic fields and radio waves to produce detailed pictures of the inside of your body; it can also be used to check whether cancer has spread
- chest [X-ray](#) – this will indicate whether cancer has spread to your lungs
- [positive emission tomography \(PET\) scan](#) – this is similar to a MRI scan, except that it can also show how well different parts of the body are working; it can be used to see how well a person is responding to treatment

General treatment information

The options for treating each patient with cervical cancer depend on the stage of disease. The [stage of a cancer](#) describes its size, depth of invasion (how far it has grown into the cervix), and how far it has spread.

After establishing the stage of your cervical cancer, your cancer care team will recommend your treatment options. Think about your options without feeling rushed. If there is anything you do not understand, ask for an explanation. Although the choice of treatment depends largely on the stage of the disease at the time of diagnosis, other factors that may influence your options are your age, your general health, your individual circumstances, and your preferences. Cervical cancer can affect your sex life and your ability to have children. These concerns should also be considered as you make treatment decisions.

Depending on the type and stage of your cancer, you may need more than one type of treatment. Doctors on your cancer treatment team may include:

- A gynecologist: a doctor who treats diseases of the female reproductive system
- A gynecologic oncologist: a doctor who specializes in cancers of the female reproductive system
- A radiation oncologist: a doctor who uses radiation to treat cancer
- A medical oncologist: a doctor who uses chemotherapy and other medicines to treat cancer

Many other specialists may be involved in your care as well, including nurse practitioners, nurses, psychologists, social workers, rehabilitation specialists, and other health professionals.

Common types of treatments for cervical cancer include:

- [Surgery](#)

- [Radiation therapy](#)
- [Chemotherapy](#)

Often a combination of treatments is used.

It is often a good idea to get a second opinion, especially from doctors experienced in treating cervical cancer. A second opinion can give you more information and help you feel more confident about choosing a treatment plan. Some insurance companies require a second opinion before they will agree to pay for certain treatments. Almost all will pay for a second opinion. Still, you might want to check your coverage first, so you'll know if you will have to pay for it.

Your recovery is the goal of your cancer care team. If a cure is not possible, the goal may be to remove or destroy as much of the cancer as possible to help you live longer and feel better. Sometimes treatment is aimed at relieving symptoms. This is called *palliative treatment*.

What happens after treatment for cervical cancer?

For some women with cervical cancer, treatment may remove or destroy the cancer. Completing treatment can be both stressful and exciting. You might be relieved to finish treatment, but find it hard not to worry about cancer coming back. (When cancer comes back after treatment, it is called *recurrence*.) This concern is very common in people who have had cancer.

It may take a while before your fears lessen. But it may help to know that many cancer survivors have learned to live with this uncertainty and are living full lives.

For other women, the cancer may never go away completely. These women may get regular treatments with chemotherapy, radiation therapy, or other therapies to try to help keep the cancer in check. Learning to live with cancer that does not go away can be difficult and very stressful. It has its own type of uncertainty.

Follow-up care

After your treatment ends, your doctors will still want to watch you closely. Ask what kind of follow-up schedule you can expect. It is very important to go to all of your follow-up appointments. During these visits, your doctors will ask questions about any problems you may have and examine you, including regular pelvic exams and Pap tests. You will need to keep getting Pap tests no matter how you were treated (cone biopsy, hysterectomy, or radiation). Lab tests and x-rays or other imaging tests may also be done look for signs of

cancer and long term effects of treatment. Almost any cancer treatment can have side effects. Some may last for a few weeks to months, but others can last the rest of your life. The visits with your doctor are the time for you to talk to your cancer care team about any changes or problems you notice and any questions or concerns you have.

Seeing a new doctor

At some point after your cancer diagnosis and treatment, you may find yourself seeing a new doctor who does not know anything about your medical history. It is important that you be able to give your new doctor the details of your diagnosis and treatment. Gathering these details soon after treatment may be easier than trying to get them at some point in the future.

Make sure you have this information handy:

- A copy of your pathology report(s) from any biopsies or surgeries
- If you had surgery, a copy of your operative report(s)
- If you were in the hospital, a copy of the discharge summary that doctors prepare when patients are sent home
- If you had radiation therapy, a copy of the treatment summary
- If you had chemotherapy, a list of the drugs, drug doses, and when you took them
- Copies of your x-rays and other imaging studies (these can often be put on a DVD)

Can cervical cancer be found early?

Cervical cancer can usually be found early by having regular screening with a Pap test (which may be combined with a test for HPV). As Pap testing became routine in this country during the past half century, pre-invasive lesions (pre-cancers) of the cervix became far more common than invasive cancer. Being alert to any signs and symptoms of cervical cancer (see "[How are cervical cancers and pre-cancers diagnosed?](#)") can also help avoid unnecessary delays in diagnosis. Early detection greatly improves the chances of successful treatment and prevents any early cervical cell changes from becoming cancerous.

The importance of screening in finding cervical cancer and pre-cancerous changes

In countries where women cannot get routine cervical cancer screening, cervical cancer is much more common. In fact, cervical cancer is the major cause of cancer death in women in many developing countries. These cases are usually diagnosed at a late (and invasive) stage, rather than as pre-cancers or early cancers.

Not all American women take advantage of the benefits of cervical cancer screening. About half of the cervical cancers diagnosed in the United States are found in women who were never screened for the disease. Another 10 percent are found in women who hadn't been screened within the past 5 years. In particular, older women, those without health insurance, and women who are recent immigrants are less likely to have regular cervical cancer screening.

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FREEDOM FROM DIABETES

Dr. PramodTripathi

MBBS, Founder, Freedom from Diabetes



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His researchful, innovative, empathetic, scientific and spiritual approach to the human existence has empowered him to refill thousands of lives with the sweetness of joy and excitement.

DrPramodTripathi, born on November 15, 1973, is the one wise brain, compassionate heart, and enlightening soul behind **Freedom from Diabetes**.

DrPramod has helped hundreds of people lose weight; get rid of diabetes, blood pressure, cholesterol and thyroid medications through natural changes in habits related to food, exercise and positivity.

He is one of the most prominent leaders' in the field of holistic health and stress management. His basic passion is to help people look and feel younger and he himself is a living example of youthfulness and positivity.

Freedom from Diabetes – is a breakthrough, a revolution; a system, a management that has pulled off remarkable freedom from vicious diabetes for thousands in India and across the globe. It is a mission that has become possible by a rare union of physical, emotional and spiritual senses.

“Freedom from Diabetes is about educating and supporting diabetics to become free from medicines and insulin by following a pure natural path. Sweetness in their life comes back on its own!” affirmed DrTripathi.

The FFD Protocol

(TAKE AWAY MESSAGE FOR DOCTORS)

Objectives of the FFD Protocol:

The primary objective of the FFD protocol is to develop a stronger approach for the management of diabetes. The emphasis is laid on changing habit patterns related to the three modifiable factors namely diet, physical activity and inner transformation through stress release and developing positivity.

Origin of the therapy:

Recommended dietary management has been designed to address the attributable causes of diabetes namely:

1. Intake of foods containing insulin like growth factor
2. High acid in the body
3. High overall body fat
4. Chronic inflammation
5. Lack of micronutrients like enzymes, vitamins, minerals, etc

1. Intake of foods containing insulin like growth factor:

Hormones in milk:

Cow's milk is known to contain around 59 active hormones and a number of allergens, herbicides, pesticides, dioxins etc. One of the most important hormones is Insulin like Growth Factor (IGF). When the cow's milk is consumed it causes chemical and organic imbalance leading to rapid growth and excess of weight gain.

2. High acid in the body

Acid and Alkaline Base in Body:

Blood is alkaline in nature and the normal ratio of alkalis and acid in blood are 4:1. Thus we need to consume around 80% of foods that are alkaline in nature and 20% of foods that are acidic. Foods considered to be alkaline include all vegetables, fruits, and other foods like sprouts, almonds, fresh coconut, green peas, coconut water; while foods considered being acidic include meat, eggs, fish, milk products, tea, coffee, sugar, alcohol, tobacco, soft drinks, salt, insecticides, pesticides etc.

3. High overall body fat:

Decreasing the fat in the body:

With high overall body fat, insulin resistance almost invariably occurs, and might be a major trigger for disease-generating mechanisms.

4. Chronic inflammation:

Para-inflammation is associated with obesity and is triggered by a number of factors like leptin and insulin resistance. Para-inflammation leading to chronic inflammation is associated with an increase in insulin resistance.

5. Lack of Micro nutrition:

Micronutrients are vitamins and minerals required in small quantities for specific physiological functions like co-enzymes and cofactors required for metabolic processes like glycolysis, lipid metabolism and amino acid metabolism; and are thus essential for sustaining life

Component 1: Diet

Dietary Modification:

The following are the dietary recommendations based on the above given dietary principles:

- a. Avoiding all milk and milk products like curd, buttermilk, butter, ghee, paneer, cheese completely.
- b. Consumption of live foods in the form of smoothie which is a combination of green leafy vegetables, fruit and anti-diabetic spices like cinnamon made into a liquid drink that is alkaline, low in fat and micronutrient dense.

- c. Avoiding cereals in the breakfast meal and restricting it to lunch and dinner only.
Breakfast is legume/ pulse based.
- d. Consumption of equal proportion of whole cereals, dals/legumes, vegetables and salads in lunch and dinner.
- e. Avoiding all sorts of sugars, white sugar, white flour, sweets and artificial sweeteners.
- f. Advising on consumption of organic foods as much as possible.
- g. Complete plant based diet as a source of protein. This is done by increasing the consumption of daals and legumes in the form of sprouts.

Component 2: Exercise

Exercise is one of the vital components of this therapy. Regular exercise is known to have a positive effect on most organ systems and reduces the risk of several chronic diseases such as type 2 diabetes, cancer and cardiovascular disease. Exercise also increases endurance capacity. Regular exercising is known to reduce the difference between pharmaceutical dependence and drug free blood sugar control. Exercise is known to improve insulin sensitivity thus leading to reduced insulin dosage, improved glucose tolerance, reduced total cholesterol and triglycerides with increased HDL levels and weight loss.

The other most important effect of exercise is secretion of human growth hormone (hGH).

Component 3: Inner Transformation

Mechanism of action of it in new THE THERAPY

Clinical experience of new THE THERAPY

Mechanism of brain cell functioning and the operation of human brain have been studied extensively by scientists. Through self consciousness the mind can use the brain to generate molecules of emotions and override the system. Thus, proper use of consciousness can bring health to an ailing body, inappropriate unconscious control of emotions can easily make a healthy body diseased. Positive and negative beliefs not only impact our health but also every aspect of our life, and your biology adapts to those beliefs.

FREEDOM FROM DIABETES PROGRAMS

Freedom from Diabetes conducts 4 types of programs to achieve its goals :

1) Basic Program - 1.5 Hours

Basic programme is one and half hour session highlighting as to what is Diabetes and reasons for its increase. Gives you full CLARITY about diet and exercise

2) Foundation Program - 4 Hours

Foundation programme is four hour session. Gives you a full EXPERIENCE of diet, exercise and stress release processes. This will be followed by lunch so that you get to taste the food and also understand the same.

3) Intensive Program – 16 Weeks

Intensive Program is designed to support you and ensure that you practically apply our approach in day to day life and experience success in getting off insulin and medicines. It is a unique combination of 3 more Group Sessions + 2 Medical Consultations + Regular / daily follow-up and feedback with doctor + Group connectivity through FFD app. This is done after the Basic/Foundation session.

4) Transcendental Residential Program – 6 Days

Staying together with a group of diabetics, doctors, fitness experts and cooking experts in pristine nature with the purpose to become free can be a life transformational experience. This residential program just does that!

Till now, following one of our above programs, more than 5000+ diabetics are free of tablets and 1000+ are free of insulin!!!

INFERTILITY AND AYURVEDA

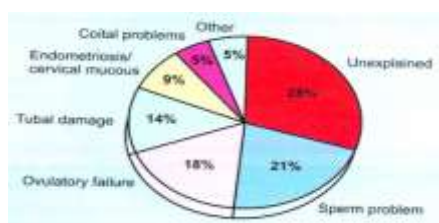


वैद्य. आशुतोष यार्दी. (एम.डी.आयुर्वेद.) तज्ञ आयुर्वेद च कत्सकना शक
“आयुर्वेद च कत्सालय” अनंत संकुल , कानडे मारुती लेन , ना शक १/ शाखा – देवदत्त सोसायटी, गजानन
महाराज मंदिर रोड, इंदिरानगर ,ना शक / दूरध्वनी – ०२५३- २५०१२२४/ २३२६१३० .. / ९८२३३११२२४
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ना शक शहरातील प्र थतयश आयुर्वेद तज्ञ
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“प्रकृती रंजन” हा आरोग्य वषयक मनोरंजनात्मक कार्यक्रम ३०० पेक्षा अ धक ठिकाणी संपन्न.

Introduction and Modern Perspective

In this jet age stress, strain, wrong life style, artificial and chemical based food, pollution, continuous use of Cell phone, laptop that is electro magnetic field like many problems are increasing. Its adverse effects are exerted on physical and psychological health. Infertility related to uterine and tubal problems, PCOD like problems, problems in generating healthy sperms are increasing.

Modern medicine defines infertility as Inability of a woman to conceive or a man to induce conception after one year of regular sexual intercourse without any contraceptive measures or retaining the foetus till the birth is termed as Infertility. Due to infertility problem physical, emotional as well as social life of the couple is disturbed.



Types-

- 1) Primary infertility (Women has never conceived)
- 2) Secondary infertility (Woman has previously been pregnant, regardless of the outcome, and now unable to conceive)

In infertility treatment it is important to know terms

- 1) Sterility (Not being able to conceive),
- 2) Infertility (Implantation never occur or leads to miscarriage)
- 3) Subfertility (Reduced fertility or chance of getting pregnant, needs too much efforts in balancing treatments also)

Some of research analysis explains about causes that percentage of unexplained infertility is increasing.

Many causes like coital problems, endometrial or tubal problems, hormonal problems, sperm and spermatogenesis problems, infections are observed in infertility. Among all problems many times unexplained infertility is a challenge to treat.

In Female infertility investigations regarding Endocrine causes, menstrual cycle causes, Ovarian causes, Tubual and uterine causes, Cervix related causes and associative infective causes are investigated.

In male infertility Pre testicular causes (Endocrine and coital disorders), Testicular causes (Genetic, Congenital, Vascular, immunological), Post testicular causes(Obstructive, Epididymal, Vasal, acquired ..etc) all are ruled out in investigations.

Ayurvedic Perspective

In infertility Ayurveda focuses on anatomical, physiological and psychological or emotional problems. Not only that Spiritual and Yogic aspect is also important in treating Infertility. Ayurveda explains that in treating infertility, consideration of balancing body and mind with proper lifestyle of both man and woman is important for conception.

Modern medicine says some times there is still unexplained infertility. Here Ayurvedic view about diet, life style, body cleansing methods, medicinal herbs and counseling plays important role. And we have to focus on lifestyle management. Many causes regarding lifestyle are observed in infertility.

In Ayurveda , Charak samhita texts explains about general causes of uterine problems and infertility as

“ मथ्याचारेण ताः स्त्रीणां प्रदुष्टयेनार्तवेन च !

जायन्ते बिजदोषाश्च्य दैवाच्य श्रुणु ताः पृथक् !! (Charak Chi. 30/8)

It means wrong diet, wrong lifestyle, menstrual cycle problems and ovulation problems, unhealthy ovum and sperm, ..etc are causes still Daiva (God, Luck, Karma,....etc) also plays some role. In modern science they are labeling it as an unexplained infertility.

For proper conception Ayurveda focuses on four important factors.

ध्रुवं चतुर्णां सान्निध्यात् गर्भः स्यात् व धपूर्वकम्।

ऋतु क्षेत्राम्बुबीजानां सामग्र्यात् अंकुरो यथा || (Sushrut Sha)

- 1) Rutu --Appropriate period for conception, proper age, days, time
- 2) Kshetra- Site, organ, system for conception means healthy reproductive organs
- 3) Ambu- Nourishment of reproductive system and nourishment of body and mind
- 4) Beej- Healthy sperm and healthy ovum.

Each factor is considered in treatment. Just like a cultivation of a plant or crop, a farmer is focusing on Season, soil, water, fertilizer, seed. All should be healthy and naturally balanced.

Hence Nowadays we have to focus on following lifestyle and environmental factors during treatment of infertility.

- 1) Work pressure
- 2) Radiation and electro magnetic field
- 3) Food addictions and junk food
- 4) Lack of exercise
- 5) Environmental and pollution
- 6) Unhealthy life style
- 7) Stress, depressions and disturbed emotional health.

Other Causes

There are many causes which may disturbs these four basic factors. In ancient texts many do's and don'ts are mentioned. For example some causes are mentioned like

- Due to under nutrition, poor digestion or obstruction due to toxins.
- Psychological state during coitus, sex done under stress or Having sex by compulsion with a person whom you do not like.
- Unhealthy and excess Spicy, salty, excess bitter food, excess alcohol,
- By controlling sexual urges for longer duration or excess and abnormal sexual activities leads to problems in Keshtra and Beej
- Damaged reproductive tissue due to low immunity or infection or trauma. Structural defects in Uterus and Vagina or tubes.
- Sleeping at very late hours, working in extreme hot or cold conditions. Handling too much of stress.
- Defect in sperm and semen.(Shukra Dosha)
- Suppressing natural urges like that of urine, stools, hunger,thirst...etc.
- Sometimes impotency or infertility prevails by birth.
- Abnormal artav dhatu due to malnourishment of uterus and ovaries.
-



General view in Ayurvedic treatment-

In Ayurveda treatments ,a common line of treatment about Uterine problems is explained as

“ न हि वाताहते योनी नारीणां सम्प्रदुश्यति” !

This explains that management of Vata Dosha is important. Uterus and its tissues, menstrual cycle, ovulation, Semen ejaculation etc all activities have predominance

of Apan vayu and its functions are also regulated by the same Apan Vayu. Hence first balance the Vata and obstructive causes due to vitiated Vata and then focus on Apan Vayu for its balanced way of function.

Then Ayurveda focuses on purification and nourishment of Rasa Dhatu. Because Stanya (Lactating hormones) and Artva(Ovum and overy related mechanism are sub types of Rasa or governed by healthy Rasa. This Rasa Dhatu get disturbed due to following causes

गुरु शीतमतिस्निग्धमतिमात्रं समश्नताम् |

रसवाहीनि दुष्यन्ति चन्त्यानां चाति चन्तनात् || चरक वमान ५/13 ||

Here we can say that Excessive intake of heavy, excess cold food, excess cold drinks, excess food more than digestive capacity, wrong timings of food or wrong type of fasting , and excess thinking with stress and worries with some emotional hurt.... All these affects on Rasa dhatu which results in either infertility or menstrual cycle problems or hormonal changes.

Another causative factors are explained related to reproductive system.(Shukravaha Strotas)

अकालयोनिगमनान्निग्रहादतिमैथुनात् |

शुक्रवाहीनि दुष्यन्ति शस्त्रक्षाराग्नि भस्तथा || Charak Viman 5/1 9 ||

It means Sexual act during wrong time, wrong age and in wrong way, excess suppression of sexual urge or excess thinking and excessive sexual activities, and some surgical procedures, Kshar and Agni karma (Like radiations, burning or heating like procedures in delicate parts) all these may disturbs reproductive channel.

* Hence Ayurvedic treatments in infertility are based on to find out hidden causes then balancing Vata Dosha and nourishment to various channels particularly Rasa and Shukra Dhatu related channels.(Strotas)

*Counselling for psychological health and overcoming on stress factors is an essential part. Proper emotional understanding between husband and wife with love, affection, faith and proper stress free privacy, creates pleasant state of mind which plays an important role in conception.

- * Rasayana therapy or Nourishment of general health and change in behavioural habits.
- * Body purifications of both male and female through Panchkarma. (Basti,Uttarbasti,Virechana..etc)
- *Boosting immunity in infective pathologies if any.
- *Focusing on Agni (Metabolism) is important.
- *Clearing obstructions. (Treating strotorodh) , blockages or outgrowths through body cleansing methods.
- * Herbal Medicines for regulation of menstrual cycle and nourishment to sperms (Semen)
- *Vajikaran chikitsa – for healthy reproductive tissues, for strength, vigour.
- *Following rules and do's and don'ts for sexual intercourse.

Conclusion

Holistic approach considering overall health condition, along with mental health and living environment is important. Ayurveda emphasizes improving the overall health of *both* the male and female.

In short Ayurveda focuses on

- 1] a disciplined life style
- 2] conditional and healthy sexual act with consideration of spirituality.
- 3] use of vajikaran drugs (aphrodisiac herbs) to achieve these sexual goals.
- 4) Use of medicated Ghee (Like Phala Ghrita.. for nourish ment of uterus and ovaries)
- 5) Use of medicated milk, medicated oils And Herbs like Shiv Lingi bij, Yashtimadhu, Shatavari, Sariva, Gokshur, ...etc many herbs are used.
- 6) Treating route cause properly considering Ayurvedic view regarding causes (etiological factors)
- 7) Use of medicinal herbs along with Panchkarma treatments like Virechana, Basti,Uttar Basti,...etc
- 8) Advising Yoga, Pranayama and meditation for healthy body and mind.

YOGALATES (THE MOST EFFECTIVE WAY FOR WEIGHT LOSS)

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INTRODUCTION

WHAT IS YOGALATES?

YOGALATES IS A FINE COMBINATION OF YOGA and PILATES which involves mix of systemic flow of yoga asanas and rhythmic pilate moves which are intended to build up stamina, flexibility and strength.

Yoga means unity and is practiced worldwide to unite mind body and soul by simple yet complex exercises in conjunctions with breathing called ASANAS or postures.

PILATES is also exercises for body with special attention to breathing and it works more on the core muscles.

Therefore, when you combine yoga and Pilates.IT JUST WORKS WONDERS and is called **YOGALATES**.

Yogalates exercises incorporates simpler forms of body postures suitable for people who find traditional yoga postures difficult. Yoga generally promotes flexibility and relaxation while PILATES enhances motion, strengthens the muscles thus improving the overall body postures.

Yogalates is becoming an accepted exercise worldwide because of its helpful effects on the mind and body thus allowing one to push the body with an open perspective.

ADVANTAGES OF YOGALATES:

1. MUSCLES:

The fusion creates endurance muscles toning,strengthens the core and flexibility.

2. BALANCE:

It helps in balancing the mind and body because balance is of vital importance in our life.

3. POSTURE:

As the muscle stretches it strengthens and tones up this brings about correct posture and body alignment.

4. DETOXIFICATION:

Yogalates exercises not only work on the muscles and bones but also on the internal organs and glands where the body is able to self-regulate and flush out unwanted toxins through sweating or regular bowel movements and enhances a stable healthy diet.

5. HELPS REGULATE BMW(Body Mass Weight)

Yogalates helps to burn unwanted fat and maintain body mass weight. More calories are burnt by decreasing cortisol levels. The key is to do it naturally at ones own pace thus fully concentrating to trigger internal organs, glands and muscles where a lot of energy is required.

6. TRANSFORMATION:

Yogalates generally outlines changes in the mind and behavior which ultimately frees one from stress anxiety and transforms the thought process to being positive towards life thus becoming peaceful within their inner being.

7. BRAIN CONTROL:

Yogalates improves brain control in various aspects especially in consuming healthier foods, improving sleeping habits etc.

DUE TO IMPROVED EXERCISE TECHNIQUES YOGALATES has improved lives of countless people

YOGALATES EXERCISES

Always perform some warm ups before starting the main exercises

CORRECT BREATHING

The main aim is to work on the core with the correct way of breathing.

Always expand your abdomen and chest on inhalation and contract it on exhalation.

STEP1 : Inhale deeply thus expanding your abdomen and chest, exhale and contract, draw your naval as far as possible towards your spine and tighten your core muscles to the maximum thus zip up the pelvic area thus drawing the muscles upwards. In yoga you fully expand your abdomen and chest inhalation, get into required posture, hold the breath in the posture or hold the posture longer with few deep inhalations and exhalations whereas in yogalates you inhale deeply expand the abdomen and chest , exhale completely ,contract and draw the naval completely in towards the spine, zip up the pelvic area and perform the exercise but during the exercise RETAIN the pelvic zipped up and abdominal muscles drawn in thus retaining the naval as close to the spine as possible , thus breathing in and out as required on completion slowly release.

STANDING POSTURES:

1. COMPLETE BREATH:

Stand straight with arms by the side and feet together. Inhale, lift your shoulders, thus bringing the arms up until the palms meet above the head and at the same time lift the feet up to stand on the toes, thus tightening the core muscles. Exhale and bring the arms down.

Repeat 10-15 times

2. CHAIR POSE:

Stand straight with feet together, inhale bring your palms together up, exhale and bend your knees

Repeat 10-15 times.

3. SPINAL BENDS

Stand straight with the feet together and arms extended straight in front of the body. Inhale deeply, stretch out the arms and bend as far back as possible, thus tightening the core muscles. Exhale and bend forward as far as down as possible. Clasp the hands behind the ankles, bend your elbows and bring down the forehead to touch the knees. Hold for a few seconds, inhale and lift your body back again. Repeat 10-15 times.

4. The pump :

Stand straight with feet slightly parted. Lift the right leg up and keep on pulsing it down 30 to 40 times like a pump. Repeat the same with the left leg.

5. The switch:

Sit straight. Raise both the legs 2 feet above the ground. Inhale, bend both the knees, stretch the right leg, press it to the abdomen. Exhale, straighten the right leg and bend the left leg in the same way. Keep on switching each leg 20 times thus inhaling and exhaling.

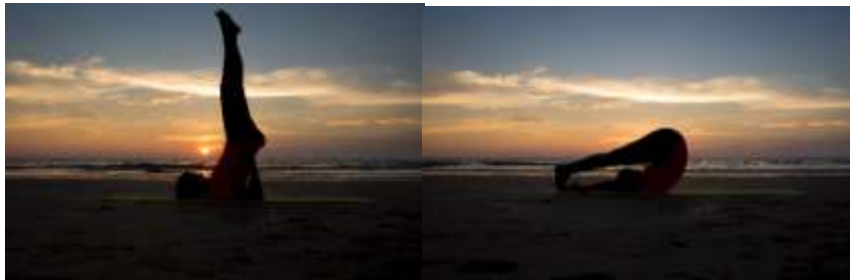


6. Scissors:



Lie down, Lift both the legs straight in the shoulder stand. Inhale deeply, bring the right leg down, exhale, bring the right leg up and left leg down. Repeat this 15-20 times tightening the core muscles.

7. Shoulder stand to halasan:



Lie down straight. Inhale and slowly bring legs and the body up to the shoulder stand. Then slowly exhale and slowly bring the legs back to halasan. Repeat going to and fro 20-30 times ,thus tightening the core muscles.

There are over a thousand yogalates exercises.It is basically combining yoga postures using the core muscle breathing and repeating the exercise 20-30 times

Yogalates

Case Study

In Australia and Kenya the study was done and compared between a group of students who did normal exercises 3 hours a day and a group of students who did yogalates for 3 hours a day at intervals.Both were given the same diet and this was done for 12 days.

Results:

Group A (Normal exercises) on the 12th day weight loss was as follows:-

Average 2 kgs

Group B(Yogalates)

Average weight loss 4 kgs per person and the body was toned more than the people of group

A Such researches have taken place in our institutions

Conclusion

The above observational study demonstrated effectiveness in weight loss as due to rigorous movements, more calories are burnt and due to special breathing exercises muscles are toned up.

CONCEPTUAL STUDY OF ARTAV-KSHAYA

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Abstract

'Alpapuspadarshan' or 'Artava-kshaya' leads to disability for conception and causes vandhyatva. 'Alpapuspa' is indicative of hidden illness and may create psychological problem and worsen the vicious cycle of Artava-kshaya and Vandhyatva.. Its prevalence rate is 12-15.3% in different studies around the world. Bahir-puspa (menstrual flow) word is also used for Artava. Normalcy of Bahir-puspa also indicate Normalcy of Antar-puspa (Stree-beeja i.e. ovum) and vice-versa. Prevalence rate of infertility due to ovulatory factors is 26-44%. Present article is aimed to clarify Artava and its significance of 'Garbhakrut-Lakshana,'. 'Inability to follow dincharya, ritucharya, aharvidivishesh-aayatane produces Artavksaya. Dosha-Mainly Vata and Kapha Prakopa and Pitta-Kshaya; Dushya - (a) Dhatu : Rasa, Rakta, Mansa and Medas,(b) Upadhatu : Artava; Srotas - Annavaha, Purishavaha, Rasavaha, Raktavaha, Mansavaha, Artavavaha strotasa ; Adhishthana - Garbhashaya ;Marga-Abhyantara and Madhyama; Agni-Jatharagni, Rasadhatu-agni, Artava-agni, Rakta-agni, Mamsa-agni, Medo-agni are important Sampraptighatak which are responsible for the pathogenesis of Artava-kshaya and udbhava of disease and its Upadravaswarupa Vandhyatva.. To tackle this vicious process of 'Alpapuspha' / 'Artavksaya' study is essential. Sanshodhana therapy, use of Agneya dravyas or Swayoni dravyas i.e. having the same qualities on the basis of dravyas, gunas and karmas help in breakdown of pathogenesis.

Keywords: Alpapuspa, Artavksaya, Alpapuspa, Anuwasana Basti.



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Introduction-

The term 'Artava Dosha' consists of two words viz. Artava and Dosha. On the basis of the Nirukti -the meaning of the word 'Artava' is 'Rutua Bhavam iti Artavam'. The word 'Rutu'

means the most fertile period in female. The Artava is one of the essential factors for the production of garbha in the females and it makes its appearance only when the woman attains adulthood when her genital organs fully develop. The word 'Dosha' is derived from the Sanskrit 'Dush Vaikrute dhatu' which means to vitiate or pollute or to become impure. The word 'Dosha' is also used for Vita, Pitta and Kapha in the whole Srushti and the Purush-deha and helps in maintaining health i.e sharir and manas aarogya as far as they are in their normal states but when they get provoked by wrongful behaviour or Ahara and Vihar, produce diseases in the body. The Doshas which vitiate the Artava are called Artava-dosha. When a woman does not follow the personal hygiene especially during the Rajastrava-kala, Rutukala and Sutika-kala, the Artava gets vitiated and is called as vitiated Artava, which is one of the cause of 'Yonivyapada'.

As per Acharya Charaka - Vandhyatva, gulma, arsha, pradara etc. may get produced as updravas of 'Yonivyapadas' if they are not treated properly within time. In 'Charak-Chikitsa 30' the word 'Shukram na dharyati' refers to Vandhyatva. Vitiated Artava may cause garbhasrava or Garbha-Vikar. Acharya Charaka has not mentioned directly 'Artava dosha' as a causative factor of garbhasrava or Garbha-Vikar but he has used the word 'Kalaprasava' and 'Sarva indriya sampurnata' as the result of 'Shuddha-Artava'. By this we can presume that vitiated Artava will be responsible for 'Akala Prasava' and Garbha-Vikar i.e. Garbha which lacks of prakruta indriya and leads to Garbhasravi and Mrutavatsa i.e. another types of Vandhya as mentioned by Acharya Hareeta. Acharya Charaka has mentioned Asrig-dosa as one, which causes delay in conception. Artava doshas are one of the hetu of Vandhyatva (Vandhya nashtartava vidyat). In Sushruta Uttar-tantra 'Nashtartava' has been told as one of the hetu of Vandhyatva. The word 'Nashtartava' means cessation of menstruation slowly or abruptly and this cessation of the menstrual flow is the Artava-kshaya dosha.

The present Article deals with 'Alpa-Artava'. In Vandhyakalpadruma the word 'Alpa-Artava' has been used. Acharya Sushruta has mentioned the word 'Kshinartava'. These may lead to 'Nashtartava'. Acharya Kashyapa has described it as 'Alpa-pushpa'. So one must study Alpa-Artava/Artava-kshaya/Raja-kshaya/Alpa-puspa in detail.

Methods –

Nirukti of Artava-kshaya - On the basis of grammatical derivation the word 'Kshaya' has been derived from 'Kshi' dhatu which means to cease or to get reduced, apachaya, hraasa or

slowly reduction. In 'VishalShabdaKoshaSagar' the word 'Kshaya' means nyunata, apachaya. In Charak Samhita, the word 'Kshaya' means hraasa, nyunata.

In 'Shabda Kalpadruma', the meaning of the word 'Alpa' has been written 'Kshudrapramana', which is suggestive of the lesser in quantity. Thus the definition of 'Alpa-Artava' may be like this -The cessation of a substance in quantity and quality which is necessary for the reproduction or progeny is 'Alpa-Artava'. The description made by Acharya Venimadhav Shastri in 'Ayurvediya MahasabdaKosha' regarding 'Artavakshaya' is as follows-'Kshinartav Nam Artavasaya Swapraman hani'.

Prakrut Praman of Artava - While describing about the lakshanas of 'Suddhartva', Maharshi Charaka did not mention the exact quantity of 'Suddhaartava' due to some varying factors viz- Desha, Kala, Ahara-Vihara, Prakruti etc. He used the word 'Naivatibahul nati alpam artavam shudham adishit'. Acharya Vagbhata and Bhavprakasa have mentioned the quantity as 4 anjali. At the present juncture, is more appropriate to agree with the statement of Acharya Charak because the quantity which is normal for one lady may be abnormal for other lady due to the variations in the above said variable factors. In modern science also there is variation regarding the quantity of normal menstrual blood loss has been described.

A woman is having scanty period since menarche with properly developed female genital organs, with normal primary and secondary sex characters having children then this menstrual quantity is normal for her but if she is not having children and has underdeveloped genital organs or abortions or bad obstetrical history, the quantity will be considered as 'Alpa- Pramana' for the same woman.

Here 'Alpa-Artava' as a Vyadhi has been described because vyadhi is an aggregation of lakshanas. In Kshinartava or Alpartava there is aggregation of these signs and symptoms. 'Yathochit kal adarshanam alpata yonivedana cha' constitute the 'Alpa-Artava' as a vyadhi. Second thing in favour of Alpartava as a vyadhi is that the disease process is produced by 'Nidanasevana' and 'Kha-vaigunya', Srotorodha, dosha - dushya dushti and the inter action (sammurchhana) between dosha and dushya. Here in 'Alpa-Artava' all the factors necessary for the production of a disease are playing their part. To describe 'Alpartava' in a disease form, let us start the 'Nidanpanchaka'.

According to Ayurveda the knowledge of 'Nidana Panchaka' is very important for the diagnosis and treatment aspect of a disease.

Nidana Panchaka is a group of five factors viz. Nidan, Purva-roopa, Roopa, Samprapti and Upashaya which are constituting the disease- methodology.

(1) NIDANA -

This word is used mainly in two senses. In one sense it means the final diagnosis of the disease. 'Nischitatva deeyaati pratipadyate iti Nidanam' while in other sense it means the causative factors of a disease. There is no action or karma in this universe without the cause / karana. As the disease is also one type of phenomena, it should be caused by either Nija or Agantuka hetus / causes or etiological factors.

Nija-Hetu / Nija Karana -

The causative factors which produce the disease process after dosha and dushya dushti are known as the Nija Kiranas. By taking Mitya Ahara and Vihara, the respected doshas get vitiated and while circulating in the body they vitiate those parts (Dhatu) of the body, which have low resistance power or immunity. This Nidana sevena causes Khavaigunya, Dhatu dushti and Srotosa-avarodha.

Role of Doshas in the Etiopathogenesis of Alpa-Artava-

In Charaka Samhita Sootra-Sthana XIX, it has been written that all the endogenous diseases occur invariably due to the vitiation of Vata, Pitta and Kapha i.e. due to the disturbance of the equilibrium of dhatus. Thus the doshas are the first and most essential factors in the production of a Nija Vyadhi.

The main causative factors that come into action in the production of Alpa-Artava are Vata dosha, Kapha dosha, Vata and Kapha in combined form, Vata and Pitta doshas in combined form. As described in Sushruta Sharira 2nd Chapter and also in Sushruta Sootra Sthana 15th chapter, the etiological factors or Nidan of Alpa-Artava are similar to those which provoke Vata dosha, Kapha dosha individually; Vata and Kapha doshas or Vata and Pitta doshas in combined form.

Following are the causes provoking these doshas -

Causes of Provoking Vata Dosha - The food articles, which on the basis of Rasa are Katu, Tikta and Kashaya rasa are predominant. On the basis of Gunas are Laghu, Ruksha and Sheeta predominant and on the basis of Vipak and Veerya are Katu-Vipak, Sheeta veerya and

on the basis of Mahabhutas' constitution, Vayu and Akasha predominant are capable of provoking the Vata Dosha. In Charak Samhita, it has been mentioned that Vata-Dominant Stree if indulges with Vata-prakopaka Ahara-Vihara, Vata Dosha gets provoked and produce Artavavaha strotodushti. The other causes of provocation of Vata are emaciation of the patient by any of the emaciating conditions like fever, vomiting or consumption of excessively cold things in abundance or undergoes emesis and purgation without any pre-oleation i.e. snehan karma or tries to vomit forcibly without inclination of snehapana for vomiting or suppresses the generated natural urges of flatus, urine, faeces or either she drinks fresh water in excess after a surfeit meal or travels in extremely jolting carriages or is subjected to excessive indulgence in sexual act, suffers injury or is given to an unhealthy positions of sitting, standing, lying, walking or if she undergoes on excessive physical exercise: as a consequence of such acts, Samana, Vyana and Apana Vayus get into provoked condition and if left untreated, the vitiated dosha passes through successive stages from a sanchaya to prakopa, prakopa to prasara avastha or circulates in the body by the action of Vyana-Vayu, get located in the place (dhatu) having Kha Vaigynya and this will be the succession of the prasara to sthanasamshrayavastha.

While describing about the Artava dosha, all the Acharyas have mentioned that Vata and Pitta doshas are the causative factors of Kshina-Artava. Taking this point into consideration, the following causes for the provocation of Vata and Pitta doshas can be mentioned as the Nidanans of Alpa-Artava.

The causes for the provoking of Vata and Pitta Doshas - In Charaka Samhita, it has been Written that if a Person, emaciated by the afore mentioned emaciating conditions, takes articles in the diet that are acidic, salty, pungent, alkaline, hot like Vinegar or irritating vegetables, grains or flesh or frequent pre-digestion meals or too frequent meals or takes emesis in a dehydrated stomach condition or is given to long suppression of generated urges or excessive exposure to the wind and Sun, disturbs the functions of Samana and Apana-Vayu.

Regarding the etiopathogenesis of 'Nashta Artava', Acharya Sushruta has used the word 'doshaih' i.e. Vata and Kapha doshas as the causative factors of 'Nashta –Artava'.

The causes for the provoking of Vata and Kapha Doshas - According to Charaka, if one emaciated by the above mentioned factors, goes on eating of very unctuous, heavy, sweet and

cold foods or foods made of paste , sugar-cane , milk , tila , black grams and preparation made up of guru gunatmaka dravya; taking in excess immature curds or wine , the excessive use of flesh of wet land , aquatic and domestic animals, suppression of natural urges, the excessive drinking of after a surfeit meal and rude shaking of the body etc. are the causes for the disturbance in function of Samana Vayu, and Kledaka Kapha.

The Artava is a byproduct of Rasa dhatu and the nidanas which account for the Rasavaha Srotodushti, may be also responsible for 'Alpa-Artava'.

Rasavaha Srotodushti Nidanas - Due to the excessive intake of guru, abhishyandi (fat enriched diet) and too much mental work are the factors which vitiate the Rasavaha Srotasas. Sharangdhara has mentioned the Artava as the upadhatu of Rakta dhatu and so Raktavaha srotodushti-utpattikar hetus also cause Alpa-Artava .

Raktavaha Srotodushti Nidanas - Excessive intake of snigdha, ushna, drava articles of food are responsible for the vitiation of Raktavaha Srotasas.

The causes of 'Nyun-Artava' according to Vandhya Kalpadruma -

(1) Garbhashaya apurnata or nyunata (2) Garbhand apurnata or nyunata

Here the word apurnata or nyunata may be equated with Hypoplasia or Aplasia of the female genital organs.

Agantuka-Hetu / Agantuka Karana - Those hetus or causes which 'at first produce a disease and after that vitiate the doshas' are called as 'Agantuka Hetus'. As the present study deals with 'Alpa-Artava' and the number of Artava-vahi srotas are two as per Ayurvedic texts i.e. the garbhashaya and the artava vahini dhamanis. The Lakshans produced due to the vedha of these srotasas are pain during coitus, Artavanasha, Vandhyatva. Here the word 'Vedha' can be taken as any injury or trauma to the fallopian tubes or genital passage during the surgical procedure. Thus the 'Vedha' is one type of 'Agantuka' cause which produces the disease first and then vitiates the doshas.

(2) PURVA ROOPA (The Premonitory Symptoms) -

'The premonitory symptoms are those which precede the actual manifestation of the disease. According to Sushruta this is the 4th stage of Shatkriyakalas. In this stage, the dosha and dushya interaction (sammurchhana) occurs and the Artavavaha Srotas dushti takes place. The doshas get located in the garbhashaya. No Premonitory symptoms of 'Alpa-Artava' have been mentioned in the Ayurvedic texts but on the basis of the causative factors and the

general guidelines of the principles for the non-commitment of the Poorvaroopas, the signs and symptoms can be summarized as below :

Vata dosha - Yoni shoola, Kati shoola, Toda, Bheda

Pitta dosha - Daha in yoni

Kapha dosha — Yoni Kandu, Yoni shaithilya

(3) ROOP -

This is the 5th stage of the disease forming process according to Sushruta. In this stage, the signs and symptoms of the peculiar disease are produced and it is called as the Vyakta Avastha. According to Acharya Sushruta's classification, the following signs and symptoms of Alpartava have been enumerated.

A) Yathochit Kala Adarshanam -

In the reference given in Sushruta, the word 'Yathochitkal Adrshanam' means, the menses do not appear at the appropriate time. Here the word 'appropriate time' means, the time when a girl attains the maturity. This time is named as 'Yathochitakala' e.g. if a female is of 18 years, yet the menses have not started though it should have started at the age of approximately 13 Years in India. The other meaning of 'Yathochit' is that in a female who was menstruating regularly previously and now the intermenstrual periods are of long duration as compared to her previous intermenstrual period, the menstrual flow duration has lessen as compared to her previous menstrual flow duration. These symptoms point towards the primary amenorrhoea, secondary amenorrhoea, hypomenorrhoea as well as oligomenorrhoea.

B) Alpata:

This is the second cardinal symptom of 'Alpa-Artava'.

The word 'alpa' means 'Kshudrapramana' according to Shabda Kalpadruma. Acharya Charaka while describing about the lakshnas of 'Shuddhartava' did not mentioned its exact quantity. He used the word neither too much excessive nor too much scanty.

Due to the variations in Desha, Kala, Ahara-Vihara, Prakruti, Jati or Racial factor, its quantity may also vary. Acharya Bhavaprakasha and Vagbhata have mentioned this Shuddhartava quantity as 4 anjali.

On the basis of that the 'Alpata' should be indicative of the lessening of the quantum of the menstrual blood flow. The second meaning, we can consider from the word 'Alpata' is the

lessening of the duration of the monthly period which remains for a few days. Regarding the duration of the flow of the menstrual discharge, again there are no fixed days. According to Acharya Charaka, it is 5 nights, while according to Vagbhata, it is 3 days. Maharshi Hareeta has mentioned 7 days. In the view of these opinions, it is certain that no fixed duration is there. However, if a median is to be calculated, it comes to three days and in that condition, the flow of the menstrual blood lesser than three days may also be taken as 'Alpata'.

C) Yoni Vedana-

In 'Alpa-Artava' according to the causative dosha and the prakruti of the female, the vedana are of different characteristics .The following are the characteristics of Yoni Vedana due to the vitiated doshas :

Vata dosha - Toda, Bheda ; Pitta dosha - Osha, Chosha, Daha

In Vandhya Kalpadruma, the following signs and symptoms of Artava doshas have been illustrated -

- (1) Burning sensation during the coitus, Kampa, Bhrama, Nausea
- (2) Headachae, Nabhishoola , Unconsciousness, Gurgling Sound in the intestines, Itching all over the body, Bad smell from the body, Coating of the teeth, Mandagni

In Alpa-Artav, Lakshnas of Rasavaha Strota Dushti can be noted; as Artava is an Updhatu of Rasadhatu.

Lakshnas of Rasavaha Srotodushti –

- | | |
|----------------|---------------------------|
| 1. Aruchi, | 7. Srotorodha, |
| 2. Virasata | 8. Napunsakata, |
| 3. Alasya, | 9. Shaithilya , |
| 4. Tandra, | 10. Mandagni, |
| 5. Angamarda, | 11. Untimely grey hair, |
| 6. Pandu roga, | 12. Wrinkles in the body. |

Lakshanas of Artavavaha strotodushti –

1. Pain in Yoni during the coitus, 2. Vandhyatva, 3. Artava-nasha

As the causative factors of Alpartava are mainly Vata dosha and Kapha dosha as described in Sushruta , the following signs and symptoms due to vitiated Vata Dosha and Kapha Dosha may also be encountered under-the Lakshanas of Alpa-Artava.

Symptoms due to vitiated Vata Dosha -

- | | |
|--|-------------------------|
| (1) Adhmana, | (7) Sandhi Shoola, |
| (2) Krushata, | (8) Angamarda, |
| (3) Karshnya, | (9) Balhani, |
| (4) Longings for hot articles of food, | (10) Bhrama, |
| (5) Kampa, | (11) Pralapa, |
| (6) Sirah shoola, | (12) Indriya Vikalpata, |

Symptoms due to vitiated Kapha Dosha -

- | | |
|---------------------|-----------------------|
| (1) Aruchi, | (5) Sheeta sparshata, |
| (2) Lala srava, | (6) Anga Saithilya, |
| (3) Nidra Adhikata, | (7) Swasa-Kasa, |
| (4) Alasya, | (8) Sthaulya. |

Symptoms due to Pitta Kshaya -

- (1) Agnimandya (2) Prabhahani (3) Anga sheetata

Manasik Lakshanas -

As the healthy mental State is dependent upon the healthy body state and vice versa; in Alpa-Artava since the body is not in a balanced state of doshas, dhatus and malas, it is quite obvious that Mana may also get affected. Hence the following manasik lakshanas (Symptoms) can be noted in the patients of 'Alpa-Artava'.

- (1) Lack of concentration of mind due to vata-vruddhi.
(2) Chinta due to vata,
(3) Glani

(4) SAMPRAPTI –

According to Acharya Vagbhata, the way in which the doshas get vitiated and the course it follows for the manifestation of the disease is called samprapti or jati or agati. The samprapti helps in the comprehension of the specific features of a disease.

Pathogenesis of Alpa-Artava -

Samprapti is further classified depending upon certain specific characteristics like the number and types of disease, dominance of doshas, the varieties of disease, dominance of one or the other attribute of doshas and the time of manifestation or aggregation of disease.

As the present study deals with 'Alpa-Artava', in the Ayurvedic texts, it has mentioned as a form of Artava Dosh and again there is a separate description about 'Kshina-Artava' along with its lakshanas and the line of treatment. There is no description about the types of Alpa-Artava. Generally, Alpa-Artava is seen in two forms i.e. (1) Primary form since menarche (2) Secondary form (who were previously menstruating normally i.e. in normal quantity). Both these conditions are pathological. If Alpa-Artava is during Lactation period, pre pubertal stage, during climacteric period then it can be normal physiological due to the effect of age factor and time factor.

Etiopathogenesis of Nashta-Artava has been described in Sushruta Samhita and there 'Dushai' word has been used. The word 'Doshai' means the combination of doshas i.e. Vata and Kapha. The word 'Avrutta' means to get obstructed-and the whole quotation mentioned in the very samhita means that due to the obstruction in the Artavavahi strotas, the quantity of Artava ceases or it stops totally. Although there is no description about the name of dominant dosha but the dravyas mentioned in treatment of Alpa-Artava are Vata and Kapha-Shamak. Thus we can presume from the treatment aspect about the dominance of the Doshas in Alpa-Artava. Acharya Sharangadhar has mentioned the etiopathogenesis of 'Anartava', which also point towards the obstructive condition of Rasavaha Sira as one of the aetiopathological factors of 'Anartava'.

Maharshi Kasyapa has used the word 'Puspa' for Artava and he has mentioned certain menstrual disorders viz. Shushka Revati, Katambhara, Vikuta Jataharini and these menstrual disorders are the result of Jataharini graha-bhadha. These three menstrual disorders can be taken for primary amenorrhoea because the following Lakshanas are found in these Jataharini graha bhadha.

a) Sushka Revati - When a female attains her age of 16 years old, even then the menstrual phenomena doesn't take place and her Bahu and Kucha (Sphik Pradesha) are emaciated then she is considered to be suffering from Sushka revati graha.

b) Katambhara - The woman who doesn't menstruate in the uchita kala (appropriate time) and she becomes krisha, heenbala, krudhha and ultimately dies is known as Katambhara.

c) **Vikuta** - When the menstrual discharge is vishama in kala, varna and pramana from the very beginning and there is Balhani and glani in the woman then she can be considered as suffering from vikuta jataharini . This may point towards the scanty period since menarche.

Role of Amadosha in the Samprapti of Alpartava-

‘Ama’ which is an undigested or improperly digested (chyle) product of the Ahara- Rasa, being heavy in characteristics, may come directly through the blood circulation in the Artavavahini strotas as (Arteries and veins of the ovary and the uterus) and thereby producing obstruction in Artavavaha Strotas. Thus the bed for garbha or garbha dhara kala(decidua-compact and spongy layers), and the vascular tree in the uterus (spiral arterioles) can not be formed normally as in normal menstrual cycle because Rajovaha Siras are unable to fulfil the Garbhashaya due to lack of nutrition (Poshaka Rasa) and obstruction in the Artavavaha Strotasa. Thus the Artava or the menstrual flow gets produced less in quantity and the condition is called as ‘Alpa-Artava’ disease.

The other way by which the 'Ama' (undigested food) produces Alpa-Artava is through the series of Dhatwagni paka. When the female takes Vata and Kapha vitiating Ahara -Vihara in excess then the ‘Ama Rasa’ gets produced at the Jatharagni level due to the vitiated Samana Vayu, Pachaka Pitta, Kledaka Kapha. This Ama vitiates the Rasa dhatwagni while circulating in the body by the action of Vyana vayu; the Dhatwagni and the Upadhatwagni are the part and parcel of the Jatharagni, thus due to the vitiated Rasa Dhatwagni, the initial Dhatu in the body i.e. the Rasadhatu gets produced in less quantity and the Artava, being an Upadhatu of the Rasadhatu also gets produced less in quantity as the Poshaka ‘Rasa-Dhatu’ is in the ‘Sama’ form and it is unable to provide proper nutrition to every Dhatu and Upadhatu. When this ‘Sama-Rasa’ enters into the Artavavaha Strotas, it causes uplepa in the Strotas and the diameter of the above said strotas which has already been narrowed, gets narrower due to the action of the Sama- Rasa and Vyana Vayu (sangaroopa-vikruti). Due to upalepa and sangaroopa vikruti, the dhatu in the Garbhashaya i.e. Rasa, Rakta, Mamsa and Meda does not get proper Poshaka Rasa and the Artava gets formed in lesser quantity and knows as ‘Alpa-Artava’. The vitiated doshas i.e Vata and Kapha mainly vitiated dhatus i.e. Rasa, Rakta, Mansa, Medas; vitiated Agni i.e. Dhatwagni, Rasa-dhatwagni, Artava agnj, vitiated Strotas i.e Artavavaha produce the signs and symptoms locally and generally in the body, a symptoms-complex known as vyadhi -Alpa-Artava is produced through these series of events.

Thus by reviewing the above said Samprapti, we can conclude that the following causative factors are playing an important role through their different gunas and karma:

- 1) Dosh- Mainly Vata and Kapha Prakopa and Pitta-Kshaya
- 2) Dushya- (a) Dhatu : Rasa, Rakta, Mansa and Medas
(b) Upadhatu : Artava
- 3) Srotas - Annavaha, Purishavaha, Rasavaha, Raktavaha, Mansavaha, Artavavaha strotasa .
- 4) Adhishthana - Garbhashaya
- 5) Marga-Abhyantara and Madhyama
- 6) Agni-Jatharagni, Rasadhatu-agni, Artava-agni, Rakta-agni, Mamsa-agni, Medo- agni.

(5) UPASHAYA -

This is a helpful tool for Nidana of a Disease which is 'Goodhalinga' and also for the differential diagnosis of a disease. From the prognosis and diagnostic aspect it is important.

Vyavachchedak Nidan of Alpartava (Differential Diagnosis)-

'Alpa-Artava' as a symptom is also noted in the following Yonivyapadas:

1) Vatala Yonivyapad - According to Vagbhata in this Vyapada there is painful and scanty menstrual discharge along with its Fenil, Tanu, Ruksha and Aruna-colour characteristics .

According to Charaka the cardinal features of Vatala Yoni-vyapad are Toda, Piplika sarpana, Stambha, Rukshata and laghuta in Yoni. Rest of the features are same as are mentioned in Vagbhata except the Alpa-pramana and Arun colour of the menstrual discharge.

2) Arajaska Yonivyapad - According to Acharya Charak the cardinal features of this Yonivyapad are as follows:

(i) Daha, (ii) Karshaya, (iii) Vaivarnya, (iv) Rajahkshaya.

But these are not the cardinal symptoms of 'Alpa-Artava' or 'Kshina-Artava'

Thus the above said Yonivyapadas are different from 'Alpa-Artava'.

3) Shandhi Yonivyapad - In this Yonivyapada, the following are the cardinal features: (1) Anartava, (2) Astani, (3) Kharsparsha during the coitus; but in 'Alpa-Artava' cardinal features are different.

4) Vandhya Yonivyapad - Maharshi Sushruta has described this Yonivyapad and the causative factor mentioned by Sushrutacharya is only Vata-dosha. The cardinal feature of this

yonivyapad as described by Sushruta is only 'Nashta-Artava' while in 'Alpa-Artava', the cardinal features are different and the causative factors are combined doshas.

Treatment of Alpa-Artava –

Acharya Sushruta has devoted one chapter to emphasize the importance of 'Shuddha-Artava, known as 'Shukra-Shonita Shuddhi Sharir'. He has categorically mentioned in this chapter that the remedy described for the treatment of 'Nashta-Artava' is also applicable to the treatment of 'Kshina-Artava' or 'Alpa-Artava'. He has described certain principles for the treatment of 'Nashta- Artava'. The principles laid down by him are as follows

- (1) Sanshodhana therapy.
- (2) The use of Agneya dravyas.
- (3) Maharshi Sushruta has advised treatment for 'Alpa-Artava' similar to 'Nashtaraktavata'.
- (4) The use of Swayoni dravyas i.e. having the same qualities on the basis of dravyas' gunas and karmas. Acharya Sushruta has mentioned certain dravyas for the oral use viz. fish, tila, masha, sura, mutra (cow's), udashchita, curd, chakra or shukta. etc. In Bhava Prakasha the same type of dravyas have been described. Ashtangasangrahaakar has advised Pittavruddhikar ahar. Acharya Kashayapa suggested use of Lasuna, Shatavari and Shatapushpa in the disorders of Artava .

Different Acharyas have mentioned the following drugs for the treatment of Alpa-artava for oral use.

Oral Use :

- 1) In Yogaratnakara, the following drugs in the form of decoction for the remedy of 'Anartava' as well as 'Alpartava' have been described. Krishna Tila, Sailu, Karavi, and Guda(Jaggery) in the form of decoction for oral use.
- 2) By Vagbhatta, the oral use of Jivaniya gana dravyas with milk has been mentioned.
- 3) According to Charaka, in condition of amenorrhoea, the blood of deer, goat, sheep or the hog should be drunk mixed with curd, juice of acidic fruits or ghee or the milk prepared with the life promoter group of drugs may be taken.
- 4) Avaleha, or Kanji, Japapuspa, Jyotishmati dalam and durva has been mentioned by Govindadasa. He has also mentioned certain other recipes which run as follows:
- 5) Sitakalyanak Ghrita
- 6) Rajah prvardhini vati

- 7) Phal Kalyana Ghrita
- 8) Kumar Kalyana Ghrita
- 9) Nashtapusantaka rasa
- 10) Shatapuspa kalpa has been mentioned by Maharishi Kashyapa
- 11) In Ayurvigyan, the use of drug named Kumari has been mentioned in anartava.

Yoni Varti – in Bhava Prakasa and Yoga Ratnakara, the following drugs in the form of ‘Yoni Varti’ have been described – Danti, Chapala, Ikswaku, Madanaphala, Kinwa, Yavsuka and Snuk Kshira. All these drugs perform the samsodhana action.

Uttar-Basti – The decoction of Kasmari and Kutaja as a vaginal douche is beneficial in ‘Arajaska Yoni Vyapada’ (Amenorrhoea) according to Charak

Discussion-

The niddan-panchak of Artava-kshaya helps in the diagnosis and to treat it. Samprapti-ghatak imparting in disease pathogenesis, also help to breakdown pathogenesis. Ayurved- science gives new approach to the etiological factors and also provides other treatment remedy than hormones itself.

Conclusion-

Conceptual study of Artava-kshaya helps to diagnosis Vandhyatva-Hetu. Its Nidan-panchak study is beneficial to treat Artava-kshaya as vyadhi which is one of complex etiological factor of Vandhyatva. Treating Artava-kshaya also helps to treat Vandhyatva and its vicious process

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**MEDODUSHTI (ADIPOSOPATHY): THE PRECURSOR OF PRAMEHA
(DIABETES MELLITUS)**

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According to ICMR-INDIAB study the prevalence of diabetes is reported to be as high as 13.6% in Chandigarh to 5.3% in Jharkhand.ⁱ The risk factors for diabetes identified in this study are age, male sex, family history of diabetes, urban residence, abdominal obesity, generalized obesity, hypertension and socio-economic status. In other words this epidemic of diabetes is related to increasing body fat, particularly the central fat due to life-style factors inherent in urbanization in genetically predisposed individuals.

Indians when compared to Caucasians and African Americans were found to have higher percentage body fat (particularly visceral fat), high insulin resistance and relatively lower body mass index (so called “lean fat phenotype”)^{ii, iii, iv} In recent studies, it was found that diabetics belonging to Jaipur have typical “lean-sick fat phenotype” characterized by comparable, BMI, overall body composition on DEXA, excepting lower fat mass in limbs and high Insulin resistance, therefore suggesting qualitative adipose tissue defects.^v

‘Adiposopathy’ (adipose-opathy) is a term used to describe the adverse anatomical and pathophysiologic consequences of pathogenic adipose tissue. The term adiposopathy can be translated as representing ‘sick fat’. These terms and this approach emphasize that adipose tissue has as much pathogenic potential to result in ill health as the pathologic dysfunction of other body tissues. Thus, ‘adiposopathy’ represents a ‘disease’ similar to other organopathies.^{vi} Adiposopathy seems to be a conceptual translation of Medo-dushti (Ca. Su. 21/2-4).^{vii}

The current epidemic of diabetes in India is the tip of iceberg and the problem of Medodushti (adiposopathy) is much larger in magnitude. As Medodushti (adiposopathy) is a chronic phenomenon, its early recognition and treatment with life-style modification, which include Ayurvedic diet, medicines and lifestyle measures and practice of yoga, can significantly reduce the burden of not only Medodushti but also the consequent burdens of diabetes mellitus and atherosclerotic vascular disease.^{viii, ix}

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